GRUNDIG

# TV Service Manual

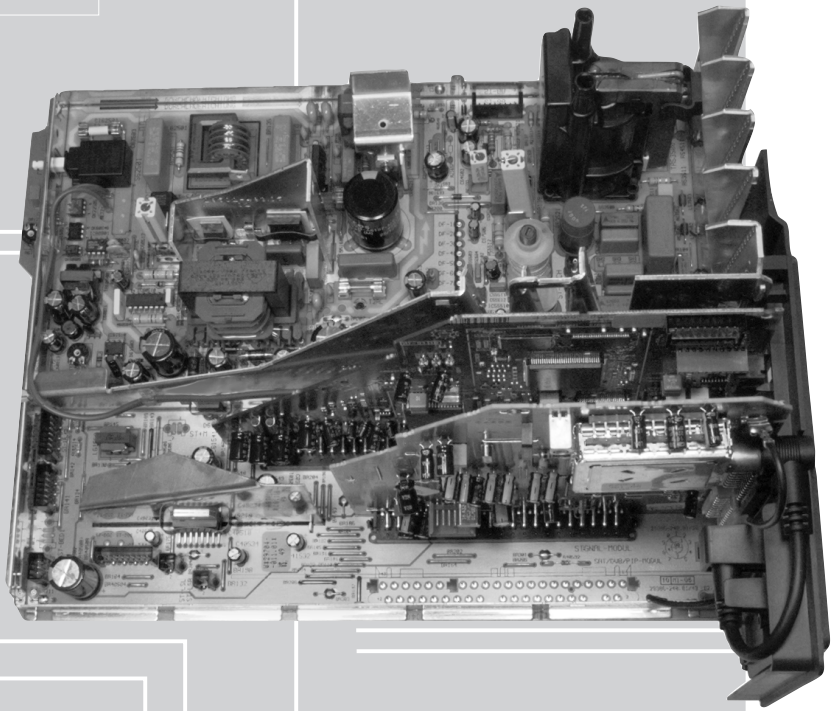
1. Ergänzung / Supplement 1

## DIGI 100 mit / with AC3

## CUC 1935

**LENARO 82**
**MFW 82-6210/9 DOLBY**
GCN9200 / VNM

**LENARO 82**
**MFW 82-6211/9 DVD**
GCN9300 / VNM



Zusätzlich erforderliche Unterlagen für den Komplettservice
Additionally required Service Documents for the Complete Service

| Service Manual | Service Manual | Service Manual | Service Training |
|---|---|---|---|
| **DIGI 100** DVD/AC3 | **DVD-Kit 1** | **Sicherheit Safety** | **DIGI 100** |
| Materialnr./Part No. 720100423000 | Materialnr./Part No. 720100424000 | Materialnr./Part No. 720108000000 | Materialnr./Part No. Ⓓ 720103501700 GB 720103501800 |

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gebührenpflichtig

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

Für das auf der Titelseite aufgeführte Chassis gilt das Service Manual DIGI 100 mit DVD/AC3.
Diese Ergänzung dokumentiert die Unterschiede bzw. zusätzlichen Bestückungen der Geräte.

Grundlage für den Service sind:
– Service Manual DIGI 100 mit DVD/AC3 (Materialnummer 720100423000)
– Service Manual DVD-Kit 1 (Materialnummer 720100424000)
– Service Manual "Sicherheit" (Materialnummer 720108000000)

The Service Manual DIGI 100 with DVD/AC3 applies to the chassis specified on the front page.
This supplement describes the differences and the additionally fitted components of the sets.

Basic instructions for servicing are given in the:
– Service Manual DIGI 100 with DVD/AC3 (Part number 720100423000)
– Service Manual DVD-Kit 1 (Materialnummer 720100424000)
– Service Manual “Safety” (Part number 720108000000)

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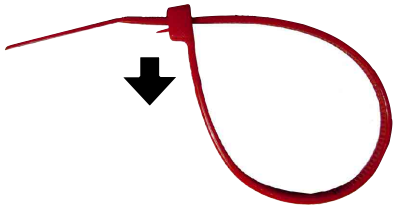
## Hinweise

**Wegen Veränderung des Schwerpunktes beim Abnehmen der Rückwand bzw. Ausbau des Chassis oder Entfernen eines eventuell vorhandenen Standfußes ist das Gerät gegen Kippen zu sichern.**

**Vor dem Öffnen des Gehäuses zuerst den Netzstecker ziehen!**

**Hinweis zu Kabelbindern zum Wiederöffnen**
Diese Kabelbinder können durch Drücken der Rastnase in Pfeilrichtung wieder geöffnet werden.

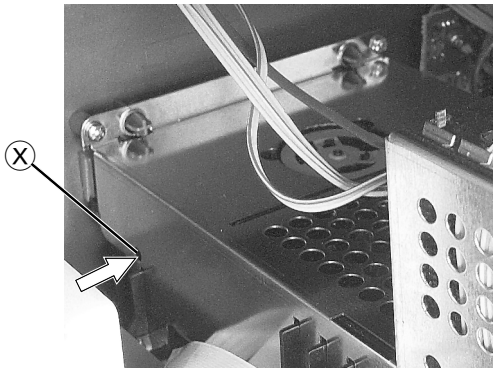


**Leitungsverlegung**
Bevor Sie die Leitungen und insbesondere die Masseleitungen lösen, muss die Leitungsverlegung zu den einzelnen Baugruppen wie z.B. Chassis, Netzschalterplatte, Bedieneinheit, Bildrohrplatte, Ablenkeinheit, Lautsprecher usw. beachtet werden.
Nach erfolgter Reparatur ist es notwendig, die Leitungsführung wieder in den werkseitigen Zustand zu versetzen um evtl. spätere Ausfälle oder Störungen zu vermeiden.

**Netzkabel**
Diese Geräte dürfen nur mit dem Original-Netzanschlusskabel mit integrierter Entstördrossel betrieben werden. Dieses Netzkabel verhindert Störungen aus dem Netz und ist Bestandteil der Gerätezulassung. Im Ersatzfall bestellen Sie bitte ausschließlich das Netzkabel laut Ersatzteilliste.

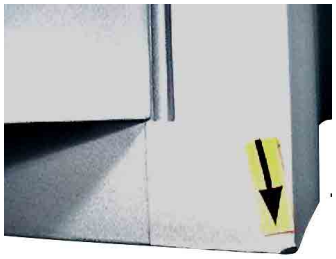
**DOLBY-Hinweis**
DOLBY und das Doppel-D-Symbol ◻◻ sind Warenzeichen der Dolby Laboratories Licensing Corporation.

**DVD/CD aus defektem Laufwerk entfernen**
Mit einem dünnen Schraubendreher durch das Loch Ⓧ den Schieber ca. 2cm nach innen schieben und Schublade herausziehen.




**Beschädigung der unteren Gehäusekanten**

Die Ecken und Kanten der Frontblende können durch leichtes Kippen des Gerätes nach vorne, z. B. beim Aufsetzen, eingedrückt werden.
Bei Transporten unbedingt darauf achten, dass die Geräte immer flach aufgesetzt werden, um dadurch die empfindlichen Ecken nicht zu beschädigen.



## Notes

**Because of the change of the centre of gravity when removing the rear panel, the chassis or an existing stand, it is necessary to protect the set from tipping.**

**Before opening the cabinet disconnect the mains plug!**

**Note to reopen the cable clamps.**
These cable clamps can be reopened by pressing the locking lug in the direction of the arrow.

**Wiring**
Before disconnecting any leads and especially the earth connecting leads observe the way they are routed to the individual assemblies like the chassis, mains switch panel, keyboard control panel, picture tube panel, deflection unit, loudspeaker and so on.
On completion of the repairs the leads must be laid out as originally fitted at the factory to avoid later failures or disturbances.

**Mains Cable**
The TV receiver must only be operated with an original mains connecting cable with an interference suppressor choke integrated in the mains plug.This mains cable prevents interference from the mains supply and is part of the product approval. For replacement please order exclusively the mains connecting cable specified in the spare parts list.

**DOLBY Hint**
DOLBY and the double-D symbol ◻◻ are trademarks of Dolby Laboratories Licensing Corporation.

**Opening the Tray when the Drive is Defective**
Insert a thin screw driver through the hole Ⓧ, push the slider about 2cm in inward direction then pull out the tray.

**Damage to the bottom cabinet edges**

The corners and edges of the front trimplate can be bashed in when tilting the unit slightly to the front, e.g. when putting it down.
When transporting the units, it is absolutely necessary to take care that they are always put down in horizontal position to prevent the corners from being damaged.

## Modulauflistung – Service Manual mit Ergänzungen
## List of Modules – Service Manual with Supplements

| Modul<br>Module | Materialnummer<br>Part Number | Service Manual<br>DIGI 100<br><br>720100423000 | 1. Ergänzung<br>Supplement 1<br>DIGI 100<br><br>720100423100 |
|---|---|---|---|
| Chassisplatte<br>Chassis Board | 29704011 . . . .<br>29704019 . . . . | Seite / Page 3-5…3-22 | Seite / Page 19…29 / 55…63 |
| Feature-Modul<br>Feature Module | 295042032500 | Seite / Page 3-23…3-34 | – |
| | 295042032800 | – | Seite / Page 30…34 / 64…71 |
| Signal-Baustein<br>Signal Module | 295042622300 | Seite / Page 3-37…3-48 | Seite / Page 35…39 / 72…77 |
| D-Verstärker<br>D-Amplifier | 295042041600 | Seite / Page 3-74…3-82 | Seite / Page 40…43 / 78…82 |
| Fokussierungsplatte<br>Focusing Board | 293050255100 | – | Seite / Page 46 / 83 |
| Bildrohrplatte<br>CRT Panel | 293051223200 | Seite / Page 3-67…3-70 | Seite / Page 44…45 / 84…85 |
| LED-Platte<br>LED Board | 293050176400 | Seite / Page 3-50 | Seite / Page 47 / 86 |
| Bedienplatte<br>Control Board | 295010853400 | Seite / Page 3-49 | – |
| | 295010854300 | Seite / Page 3-49 | – |
| Netzschalterplatte<br>Mains Switch Board | 295010871100 | Seite / Page 3-61…3-64 | – |
| | 295010872100 | Seite / Page 3-61…3-64 | – |
| Buchsenplatte Click-Fit<br>Socket Board Click-Fit | 293051603900 | Seite / Page 3-83…3-84 | Seite / Page 47 / 86 |
| EURO-AV-Buchsenplatte<br>EURO-AV Socket Board | 293051604200 | – | Seite / Page 48 / 87 |
| Netzteilplatte (FTA / DVD)<br>Mains Section Board (FTA / DVD) | 293052022100 | Seite / Page 3-55…3-60 | – |
| FTA-Netzteilplatte<br>FTA Mains Section Board | 293052022200 | – | Seite / Page 49 / 88 |
| FTA-Modul<br>FTA Module | 295041066100 | – | Seite / Page 50…54 / 89…100 |
| PIP-Signalbaustein<br>PIP Signal Module | 295042120400 | Seite / Page 3-51…3-54 | – |
| PIP/VGA-Baustein<br>PIP/VGA Module | 295042062100 | Seite / Page 3-71…3-73 | – |
| SAT-Baustein<br>SAT Module | 295042220200 | Seite / Page 3-85…3-89 | – |
| DVD-KIT | Service Manual<br>720100424000 | – | – |

## Modulübersicht / Module List

| | Materialnummer<br>Part Number | LENARO 82<br>MFW 82-6210/9 DOLBY<br><br>(VNM)<br>CUC 1935 | LENARO 82<br>MFW 82-6211/9 DVD<br><br>(VNM)<br>CUC 1935 |
|---|---|---|---|
| Bestell-Nr.<br>Order No. | | GCN9200 | GCN9300 |
| Chassis-Nr.<br>Chassis No. | | 297040197100 | 297040116800 |
| Tuner | 295043010200 | ● | ● |
| Signal-Baustein<br>Signal Module | 295042622300 | ● | ● |
| Feature-Modul (Flash 32 Mbit)<br>Feature Module | 295042032500 | — | ● |
| (Flash 32 Mbit) | 295042032800 | ● | — |
| Bildrohrplatte<br>CRT Panel | 293051223200 | ● | ● |
| Fokussierungsplatte<br>Focusing Board | 293050255100 | ● | ● |
| LED-Platte<br>LED Board | 293050176400 | ● | ● |
| Bedienplatte<br>Control Board | 295010853400 | — | ● |
| | 295010854300 | ● | — |
| Netzschalterplatte<br>Mains Switch Board | 295010871100 | — | ● |
| | 295010872100 | ● | — |
| Netzteilplatte (FTA / DVD)<br>Mains Section Board (FTA / DVD) | 293052022100 | — | ● |
| D-Verstärker<br>D-Amplifier | 295042041600 | ● | ● |
| Buchsenplatte Click-Fit<br>Socket Board Click-Fit | 293051603900 | ● | ● |
| EURO-AV-Buchsenplatte<br>EURO-AV Socket Board | 293051604200 | ● | — |
| TP 110 C | 296420614202 | ● | — |
| TP 140 C | 296420614800 | — | ● |
| DVD-KIT1 | Service Manual<br>720100424000 | — | ● |
| Modul VGA 4<br>Module VGA 4 | GAF9200 | nachrüstbar<br>retrofittable | nachrüstbar<br>retrofittable |
| Modul-SET PIP 7<br>Module SET PIP 7 | GAF9300 | nachrüstbar<br>retrofittable | nachrüstbar<br>retrofittable |
| SAT-Baustein SER 300A<br>SAT Module SER 300A | GAF9000 | nachrüstbar<br>retrofittable | nachrüstbar<br>retrofittable |
| Modul DER 1100 S-CI<br>Module DER 1100 S-CI | GAG6600 | nachrüstbar<br>retrofittable | nachrüstbar<br>retrofittable |
| WT 2 | GAG8900 | nachrüstbar<br>retrofittable | nachrüstbar<br>retrofittable |

# Technische Daten / Technical Data

| | LENARO 82<br>MFW 82-6210/9 DOLBY<br><br>(VNM)<br>CUC 1935 | LENARO 82<br>MFW 82-6211/9 DVD<br><br>(VNM)<br>CUC 1935 |
|---|---|---|
| **Bildröhre / Picture Tube** | | |
| Sichtbares Bild<br>Visible picture | 76cm | |
| Bildschirmdiagonale<br>Screen diagonal | Format 16:9, 82cm (32") MEGATRON plus, Toshiba V2 | |
| Formatumschaltung<br>Format switching | 4:3, Cinema Zoom variable, Panorama Zoom, Format Automatic, 14:9, 16:9, automatic switching PALplus (in cinema zoom) | |
| **Elektronik / Electronic** | | |
| Flash | 32 Mbit | |
| Programmspeicherplätze<br>Programme positions | 99 + 3 AV<br>(199 TV/SAT + 59 Radio + 3 AV bei Nachrüstung SAT/ when retrofitted with SAT) | 99 + 2 AV + DVD<br>(199 TV/SAT + 59 Radio + 2 AV + DVD bei Nachrüstung SAT/ when retrofitted with SAT) |
| TV Guide | ja / yes | |
| Easy dialog | ja / yes | |
| Tuner | PLL Frequenz Synthesizer Tuning UHF/VHF, globale Pinbelegung<br>PLL frequency synthesizer tuning UHF/VHF, global pinning | |
| TV-Normen<br>TV Standards | B/G, I, D/K, K', M, L/L'<br>PAL, SECAM, NTSC 4.43MHz+3.58MHz | |
| Stereo-Systeme<br>Stereo systems | Deutsch A2 / German A2 (B/G/D/K)<br>Nicam 5.85 (B/G, L) + 6.52MHz (I) | |
| Videotext<br>Teletext | TOP/FLOF Level 2.5, VPS, 2000 Seiten, mit Teleweb ca. 300 Seiten<br>TOP/FLOF level 2.5, VPS, 2000 pages, with teleweb ca. 300 pages | |
| Teleweb | ja (drahtloser Digitalempfang via VBI-Line) / yes (wireless- digital reception via VBI-Lines) | |
| Musikleistung ohne externe LS<br>Music power without external LS | Stereo 3-Channal 80W: 40W Subwoofer + 2x20W L/R | |
| Musikleistung mit Dolby Prologic<br>Music power with Dolby Prologic | Stereo 6-Channal 140W: 40W Subwoofer + 2x20W L/R + 20W center + 2x20W rear L/R | |
| Dolby surround sound | Dolby Digital AC3 | |
| VGA | nachrüstbar mit Modul VGA 4 / retrofittable with Module VGA 4 | |
| PIP | nachrüstbar mit Modul Set PIP 7 / retrofittable with Module Set PIP 7 | |
| SAT | nachrüstbar mit SAT-Baustein SER 300a / retrofittable with SAT Module SER 300a | |
| Digital-SAT | nachrüstbar mit DVB-Modul DER 1100 S-CI / retrofittable with DVB Module DER 1100 S-CI | |
| WT-Modul<br>WT module | nachrüstbar mit Modul WT 2<br>retrofittable with module WT 2 | |
| **Anschlüsse Front / Connections Front** | | |
| Kopfhörer<br>Headphones | Stereo 3,5mm Klinkenbuchse, Lautstärke regelbar, individuelle Tonkanalwahl bei 2-Ton-Empfang<br>Stereo 3.5mm jack, adjustable volume, individual channel selection with dual-sound broadcasts | |
| Cinch-AV-Buchse<br>Cinch-AV socket | 1x FBAS Video / in , 1x CCVS Video / in, 2x Audio / in<br>(AV 4 Position) | |
| S-Video | 4-polige Buchse Y-Chroma / in / 4-pin socket Y-Chroma / in | |
| **Anschlüsse Rückwand / Connections Rear Panel** | | |
| Euro AV 1 (schwarz/black) | FBAS Ein-/Ausgang, RGB Eingang, SBAS Ein-/Ausgang, Megalogic, Datalink für VCR Fernbedienung, Decoder, 16:9 / Pin8<br>CCVS in-/output, RGB input, SCVS in-/output, Megalogic, datalink for VCR remote control, decoder capable, 16:9 / Pin 8 | |
| Euro AV 2 (orange) | FBAS Ein-/Ausgang, RGB Eingang, SBAS Ein-/Ausgang (Chroma aus 15+7), Datalink für VCR Fernbedienung, Decoder, 16:9 / Pin8<br>CCVS in-/output, RGB input, SCVS in-/output (Chroma out 15+7), datalink for VCR remote control, decoder capable, 16:9 / Pin8 | |
| Euro AV 3 | FBAS Eingang, RGB Eingang, SBAS Eingang, Datalink für VCR Fernbedienung, Decoder, 16:9 / Pin8<br>CCVS input, RGB input, SCVS input, datalink for VCR remote control, 16:9 / Pin8 | DVD |
| Standard-VGA | ja, incl. NF/Eingang via 3,5mm Klinkenstecker / yes, incl. AF/input via 3.5mm jack | |
| Interface (10 Pin) | Service-Schnittstelle (Software update/flash) / Service interface (software update/flash) | |
| Interface (6 Pin) | WT-Modul / WT-module | |
| Lautsprecherbuchsen<br>Loudspeaker socket | 6 x 2 Click-Fit 4Ω | |
| Kopfhörer<br>Headphones | Stereo 3,5mm Klinkenbuchse<br>Stereo 3.5mm jack | |
| Cinch-NF-Buchse Ausgang<br>Cinch-AF socket output | 6 x Line | |
| Cinch Ausgang<br>Cinch output | – | Digital out (SPDIF-Sony/Philips Digital Interface) |
| **Netzteil / Mains Stage** | | |
| Netzspannung (Regelbereich)<br>Mains voltage (variable) | 230V±15% | 230V±15% |
| Netzfrequenz<br>Mains frequency | 50 / 60Hz | 50 / 60Hz |
| Leistungsaufnahme<br>Power consumption | ca. 115W | ca. 125W |
| Standby | ca. 1W | ca. 2W |

## Ausbauhinweise

**Front-Klappe:**
Klappe öffnen.
Anschlag Ⓐ aushängen (Fig.1, 2) und Klappe abnehmen.
Beim Einbau zuerst Anschlag Ⓐ einhängen und Schanier in die Führungen drücken.

**Front-Klappe-Bremsen:**
Front-Klappe ausbauen.
Schrauben Ⓑ herausschrauben (Fig. 4) und Bremsen herausnehmen.

**Bedieneinsatz:**
Gerät öffnen.
Bei Bedarf Steckverbindungen lösen.
Digital-Platte, D-Verstärker ausbauen (siehe Ausbauhinweis "DVD Player" im Service Manual 720100423000 auf Seite 1-6) und die beiden Chassis-Schrauben herauschrauben Chassis vorsichtig herausziehen.
8 Schrauben Ⓒ herausschrauben (Fig. 3) und Bedieneinsatz vorsichtig nach vorne abnehmen.

**Einschaltknopf:**
Bedieneinsatz ausbauen.
3 Rastnasen Ⓓ ausrasten (Fig. 4) und Einschaltknopf nach vorne abnehmen.

**DVD Player** (DVD-KIT1) ausbauen, siehe Ausbauhinweise Service Manual 720100423000 (Seite 1-6).
Für den Service des DVD-KIT1 ist das Service Manual mit der Materialnummer 720100424000 erforderlich.

## Disassembly Instructions

**Front Flap:**
Open the flap.
Unhook the stop Ⓐ (Fig.1, 2) then remove the flap.
When reassembling, first hook in the stop Ⓐ, and then press the hing into the guides.

**Front Flap Brakes:**
Remove the front flap.
Undo the screws Ⓑ (Fig. 4) then remove the brakes.

**Control Unit:**
Open the set.
Disengage the plug connectors if necessary.
Disassemble the digital board, the D amplifier (see the disassembly instructions "DVD Player" in the Service Manual 720100423000 on page 1-6), and then undo the two chassis screws. Carefully remove the chassis.
Undo the 8 screws Ⓒ (Fig. 3) then carefully remove the control unit to the front.

**Switch-on Knob:**
Remove the control unit.
Disengage the 3 locking lugs Ⓓ (Fig. 4) then remove the switch-on knob to the front.

**DVD Player** (DVD-KIT1):
See the disassembly instructions in the Service Manual 720100423000 (page 1-6).
For service works on the DVD-KIT1, the Service Manual, part no. 720100424000, is required.

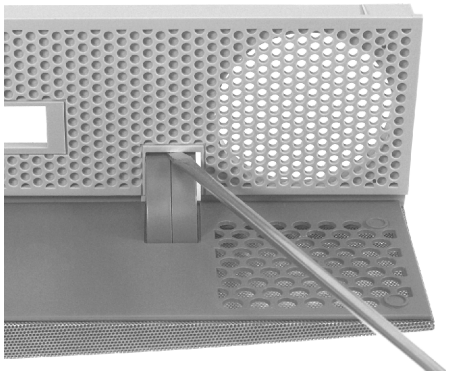


Fig. 1

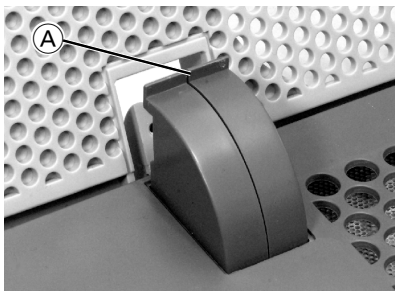



Fig. 2

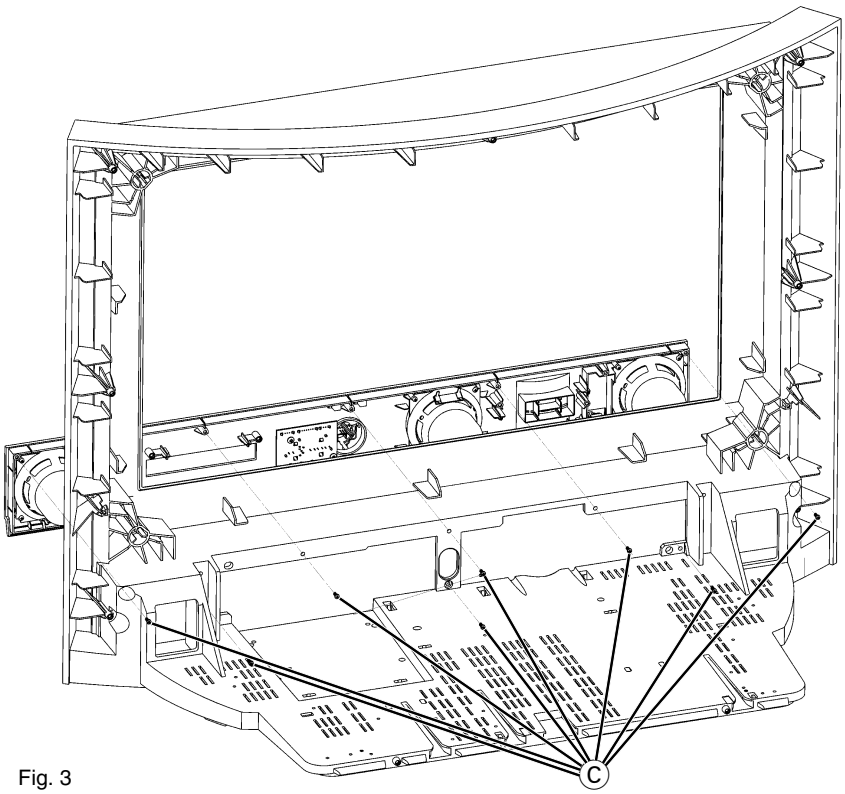



Fig. 3

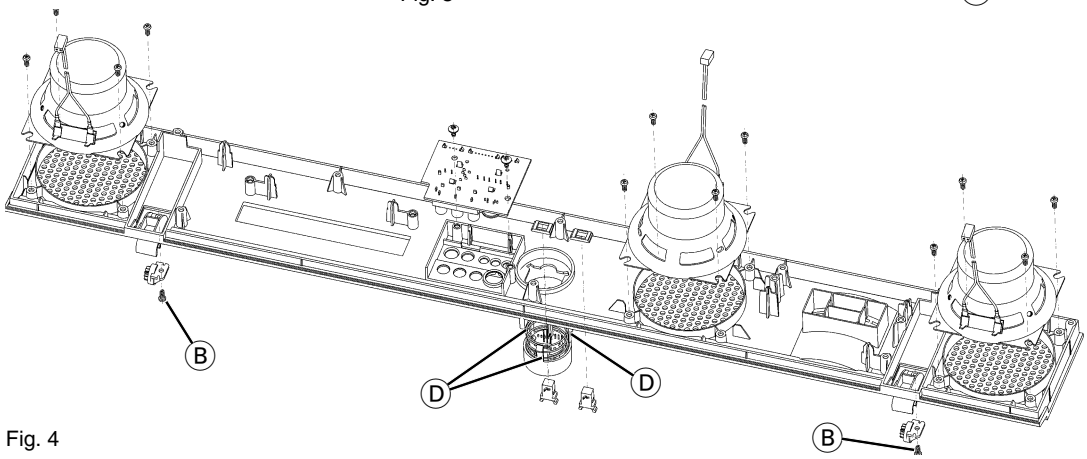



Fig. 4

# Service- und Sonderfunktionen

| | |
|---|---|
| Aufruf des Service-Menüs: | Taste "**i**" (EASY DIALOG) |
| Aufruf der Dialogzeile: | Tasten "**P+**" oder "**P-**" –> "OK" |
| Einstellung in der Dialogzeile ändern : | Tasten "**L+**" oder "**L-**" –> "OK" |
| Zurück ins vorherige Menü: | "**blaue**" Taste |
| Beenden des Menüs: | Taste "**i**" |
| Servicemenü für Händler (Codezahl) | 8500 |

## 1. Einschaltfunktionen

### 1.1 ATS-Reset
Netzschalter "EIN" mit gedrückter Nahbedientaste "**-**".
- Gerät wird mit Analog-Grundwerten geladen.
- ATS-Bit wird gesetzt. Diese Option löst beim nächsten Einschalten das ATS euro plus aus. Die bisherigen Einstellungen "Sprache", "Land" und "Programmbelegung" bleiben erhalten.

### 1.2 ATS Start
Über "Menüsprache" –> "Land" –> Satelliten (optional), das Auto Tuning System (ATS) starten.
Das ATS sucht mit aufsteigender Frequenz, angezeigt wird der Kanal.
Bei der Ländereinstellung F oder *übrige kann wahlweise auf Kanal- oder Frequenzanzeige umgeschaltet werden.

Das ATS-System ermittelt die Programme mit Senderkennung und speichert sie in die Programmtabelle.
Tastendruck "OK" bricht den ATS-Lauf ab. Das ATS-Bit wird nicht zurückgesetzt.
ATS-Bit zurücksetzen ohne die bestehende Programmbelegung zu verändern:
Nach Abbruch des Suchlaufes mit "OK" Kanaldirekteingabe in der Programmtabelle anwählen, angezeigten Kanal erneut eingeben und mit "OK" bestätigen.
Nach dem Abspeichern ist das ATS-Bit zurückgesetzt.

### 1.3 Speicherbelegung CIC38091 (SAT-Baustein)
- SAT-Kennung, Video-Daten (HUB, H/V), Tonfrequenz "High" und "Low"
- Peri, Finetuning, Kanalnummer
- Luma, Noise, Norm, Text/Menü
- Laut-Fine, Ton Peak
- Senderkennung
- LNC-Frequenz

### 1.4 Programmsperre (Kindersicherung)
Die Tastenfolge "7 0 3 8 5 8 0" hebt die persönliche Kennzahl auf.

### 1.5 Software-Versionsnummer
Das Menü "EASY DIALOG" aufrufen. Durch Betätigen der "grünen" Taste wird die Software-Versionsnummer des TV-Gerätes angezeigt.

### 1.6 Flashprogrammierung
**Benötigtes Equipment**
SERVICE Toolbox, Materialnummer 772004001200

**Eine Beschreibung zur Aktualisierung der Geräte-Software inclusive Software-Download ist in der zum Lieferumfang gehörenden Beschreibung (CD) der "SERVICE Toolbox" enthalten.**

### 1.7 PIP-Position (nur mit PIP-Baustein)
Fernbedientaste "PIP" gedrückt halten und das Gerät mit dem Netzschalter einschalten. Dadurch wird der PIP-Mode aufgerufen.
Die horizontale und vertikale Position einstellen.
Mit der Format-Taste kann die PIP-Position oben rechts/links, unten rechts/links gewechselt werden.
Mit "OK" Position speichern.
**Hinweis:** VGA- oder RGB-Signale können nicht als PIP-Bild eingeblendet werden.

### 1.8 Service - Mode Programm (zur Fehlersuche im I²C-Bus)
Diese Fehlermeldungen beziehen sich nur auf Störungen im I²C-Bus, also auf Bausteine oder Schaltkreise bei denen keine Rückmeldung (Acknowledge) über den I²C-Bus erfolgt. Beispielsweise keine Betriebsspannung am Baustein, Unterbrechung der Leiterbahn oder I²C-Schnittstelle defekt.

#### 1.8.1 I²C-Bus, IC-Test
In diesem Fehlersuchprogramm fragt der Mikroprozessor CIC80050 die am I²C-Bus angeschlossenen Bausteine oder Schaltkreise ab und zeigt sie als auszählbare Blinkfolge an der LED im Bedienteil an.

Fernbedientaste "P+" gedrückt halten und das Gerät mit dem Netzschalter einschalten.

Die Anzahl der Blinkimpulse zeigt den defekten Baustein lt. Tabelle an.
Beispiel der Blinkfolge:

rote LED blinkt schnell 10s
gelbe LED leuchtet 4s
grüne LED blinkt (z.b. 2x) = Zehnerstelle (2)

gelbe LED leuchtet 4s
grüne LED blinkt (z.B. 8x) = Einerstelle (8)

Ergebnis = 28

Mit der Fernbedientaste "L+" können evtl. weitere fehlerhafte Schnittstellen ermittelt werden.

| IC-Bezeichnung | Blink-Frequenz | Fehlerhafter Baustein/Schaltkreis |
|---|---|---|
| CIC31010 | 1 | Signal Baustein |
| CIC70200 | 2 | Feature Modul |
| CIC70250 | 3 | Feature Modul |
| CIC70300 | 4 | Feature Modul |
| CIC33010 | 5 | Signal Baustein |
| IC43140 | 6 | Signal Baustein |
| TUNER | 7 | Signal Baustein |
| CIC32040 | 8 | Signal Baustein |

## 2. Sonderfunktionen im Menü "Installation"

### 2.1 Buchstaben-Eingabe
Das Menü "Buchstaben-Eingabe" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" aufrufen.
Sie können die Buchstaben-Eingabe für die Programmwahl zwischen "aus", "ein" und "mix" wählen.

### 2.2 "Tonskala" sichtbar oder unsichtbar für alle Programme
Das Menü "Tonskala" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" aufrufen.
Bei "aus" erscheint keine Balkenanzeige für die Lautstärke.

### 2.3 Einschalten mit Programm "1" oder "automatisch"
Das Menü "Einschalten" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" aufrufen.
Auf "Programmplatz 1" oder "automatisch" stellen.
Bei "automatisch" wird der beim Ausschalten eingestellte Programmplatz beim Einschalten wieder aufgerufen (Last station memory).

### 2.4 "Megalogic-Info" (nur wenn Megalogic-Gerät erkannt wurde).
Das Menü "Megalogic Info" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" aufrufen.
Die Megalogic-Steuerung kann auf "ein" bzw. "aus" geschaltet werden.

### 2.5 Statusanzeige
Das Menü "Statusanzeige" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" aufrufen.
Sie können wählen an welcher Position ("oben" oder "unten") die Information über Tonart und Bildformat eingeblendet wird.
Bei "aus " wird nach Progammwechsel keine Information eingeblendet.

### 2.6 Automatische Lautstärke
Das Menü "Autom. Lautstärke" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" aufrufen.
In Stellung "ein" regelt der Ton-IC bei erhöhter Senderlautstärke (z. B. erhöhter HUB bei der Werbung) die Lautstärke intern auf den normalen Wert zurück.

**2.7 Rauschreduktion P1…99 bzw. P1…199 (bei SAT-Baustein)**
Das Menü "Rauschreduktion P. 1…99" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" aufrufen. Sie können die Rauschreduktion für die **Programme 1…99** bzw. 1…199 auf "aus", "gering" oder "automatisch" stellen.
Bei "manuell" wird angezeigt, dass ein oder mehrere Programme unterschiedliche Einstellungen haben.

**2.8 Bildschärfe P1…99 bzw. P1…199 (bei SAT-Baustein)**
Das Menü "Bildschärfe" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" (zur Seite 2) aufrufen.
Die Bildschärfe wird für alle Programme eingestellt.

**2.9 Farbdeckung**
Das Menü "Farbdeckung" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" (zur Seite 2) aufrufen.
Die Farbdeckung (Luma-Delay) wird programmplatzbezogen eingestellt.
Bei Geräten mit PIP-Baustein ist die Farbdeckung des PIP-Bildes zusätzlich einstellbar.
(siehe Abgleich Punkt 6).

**2.10 Rotation**
Das Menü "Rotation" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" aufrufen.
Den Darstellungswinkel zum Bildschirm auf Null abgleichen.

**3. Formatumschaltung**

**3.1 Formatumschaltung mit Schaltspannungs-Auswertung**
Das Gerät passt in Abhängigkeit von der an Pin 8 der aktiven EURO-AV-Buchse anstehenden Spannung das Bildformat an. Die Bildformat-Umschaltung ist bei AV-Betrieb für die AV-Buchse aktiv (AV 1, AV 2, AV 3).

bei 16:9-Bildröhren

| Bildformat vor dem Spannungswechsel | neues Bildformat nach Pin 8: 0/12V –> 6V | neues Bildformat nach Pin 8: 6V –> 0/12V |
|---|---|---|
| 16:9 | - | altes Format * |
| Cinema Zoom | 16:9 | altes Format * |
| Panorama Zoom | 16:9 | altes Format * |
| 4:3 | 16:9 | altes Format * |

bei 4:3-Bildröhren

| Bildformat vor dem Spannungswechsel | neues Bildformat nach Pin 8: 0/12V –> 6V | neues Bildformat nach Pin 8: 6V –> 0/12V |
|---|---|---|
| 16:9 | - | altes Format * |
| 4:3 | 16:9 | altes Format * |
| Panorama Zoom | 16:9 | altes Format * |

* unter altem Format wird das letzte vor dem Spannungswechsel manuell eingestellte Bildformat verstanden.

**4. Service-Einstellungen für den Fachhandel**

**4.1 Bildschirmgeometrie**
Das Menü "Bildschirmgeometrie" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> "8500" aufrufen.
Geometrietestbild mit vertikal beginnend abgleichen (siehe Abgleich Punkt 12).

**4.2 Bildeinstellungen**

**4.2.1 Weißabgleich**
Das Menü "Weißabgleich" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> "8500" –> "Bildeinstellungen" aufrufen.
Den Wert für "rot", "grün" und "blau" so einstellen, dass es weiß ergibt.
(siehe Abgleich Punkt 9).

**4.2.2 Blauen Bildschirmhintergrund ein/ausschalten**
Das Menü "Blauer Bildschirm" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> "8500" –> "Bildeinstellungen" aufrufen.
Auf "ein" oder "aus" stellen.

**4.3 Hardware-Einstellungen**

**4.3.1 Bildröhrentyp**
Das Menü "Bildröhrentyp" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Hardware-Einstellungen" aufrufen.
Bildröhrentyp einstellen.

**4.3.2 ZF-Typ**
Das Menü "ZF-Typ" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Hardware-Einstellungen" aufrufen.
Nach Wechsel des NVM auf dem Signal-Modul muss der ZF-Typ eingestellt werden:
Inland-Geräte: Inland
Multi 8-Geräte: Multi 8
Multi 9-Geräte: Multi 9
(siehe Abgleich Punkt 16).

**4.3.3 Terr.Tuner**
Das Menü "Terr. Tuner" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Hardware-Einstellungen" aufrufen.
Auf den im Gerät eingebauten Tuner einstellen.
(Siehe Abgleich Punkt 2).

**4.3.4 Fernbedienung**
Das Menü "Fernbedienung" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Hardware-Einstellungen" aufrufen.
Fernbedien-Typ einstellen.

**4.3.5 Hosiden-Buchse**
Das Menü "Hosiden-Buchse" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Hardware-Einstellungen" aufrufen.
Auf "ja" oder "nein" stellen.

**4.3.6 Subwoofer**
Das Menü "Subwoofer" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Hardware-Einstellungen" aufrufen.
Auf "ja" oder "nein" stellen.

**4.3.7 Lautsprecher-Funkmodul**
Die Einstellungen für das Lautsprecher-Funkmodul werden in der Montageanleitung "WT 2" (720100430000) beschrieben.

**4.4 Sonderfunktionen**

**4.4.1 Watchdog On/Off**
Das Menü "Watchdog" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> "8500" –> "Sonderfunktionen" aufrufen.
Wird der Watchdogtimer nicht in regelmäßigen Zeitabständen zurückgesetzt, wird ein Neustart ausgelöst.
Watchdog auf "aus" oder "ein" schalten.

**4.4.2 IR-Dataprogrammer (nur mit terr. Baustein)**
Das Menü "IR-Dataprogrammer" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> "8500" –> "Sonderfunktionen" aufrufen. Mit der Taste "OK" können mit dem IR-Dataprogrammer 2 max. 99 Programmplätze mit Daten für Kanal, Norm, Peri, 6-stellige Sendereinblendung, Finetuning-Mitte und Lautstärke-Offset "0" abgespeichert werden.

**4.4.3 AGC-Einstellung**
Das Menü "AGC-Einstellung" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Sonderfunktionen" aufrufen.
(Siehe Abgleich Punkt 3).

**4.4.4 TV-Guide-Flash löschen**
Das Menü "TV-Guide-Flash löschen" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Sonderfunktionen" aufrufen.
Nach Drücken der Taste "OK" wird das TV-Guide-Flash gelöscht.

**4.4.5 Videotext-Level-2.5-Unterstützung**
Das Menü "Videotext Level 2.5" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Sonderfunktionen" aufrufen.
Auf "ja" oder "nein" stellen.

**4.4.6 SAT vorprogrammieren** (nur mit bestücktem SAT-Baustein)
Das Menü "SAT vorprogrammieren" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Sonderfunktionen" aufrufen.
Mit der Taste "OK" bestätigen. Dadurch wird die gespeicherte SAT-Sendertabelle im SAT-Baustein übernommen.

**4.4.7 Erkanntes SPDIF-Signal**
Das Menü "Erkanntes SPDIF-Signal" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Sonderfunktionen" kann **nicht** aufgerufen werden. Es dient nur zur Anzeige des SPDIF-Signals.
Folgende Möglichkeiten können angezeigt werden:

| | |
|---|---|
| Nicht dekodierbar | MPEG Layer 2 |
| fehlerhaftes Signal | Dolby Digital 2-Ton |
| unbekanntes Signal | Dolby Digital 1/0 |
| Zeitsignal | Dolby Digital 2/0 |
| Rauschgenerator | Dolby Digital 3/0 |
| kein digitaler Datenstrom | Dolby Digital 2/1 |
| PCM-Daten | Dolby Digital 3/1 |
| PCM-Audio | Dolby Digital 2/2 |
| DTS | Dolby Digital 3/2 |

**4.4.8 DVD-Einstellungen**
Die DVD-Einstellungen werden im Service Manual "DVD-KIT1" (720100424000) beschrieben.

**5. Ton-Einstellungen**
Mit "blauer" Taste das Menü "Ton" aufrufen.
Im Menü "Voreinstellungen" sind die Einstellungen "Sprache", "Musik" oder manuell anwählbar.
Die "manuell"-Einstellung lässt eine Einstellung des Klanges zu. In den anderen Einstellungen sind bestimmte Werte fest vorgegeben.

**6. Bild-Einstellungen**
Mit "**roter**" Taste das Menü "Bild" aufrufen.
Im Menü "Voreinstellungen" sind die Einstellungen "Am Tag", "Am Abend" und "manuell" anwählbar.
Die "manuell"-Einstellung lässt eine Regulierung von Kontrast und Schärfe zu. In den anderen Einstellungen sind bestimmte Werte fest vorgegeben.

**7. Einstellungen über die Senderbelegung**

**7.1 Zwangseinstellungen im Programm-Mode**
Das Menü "Tonkanal" über "EASY DIALOG" –> "Programmtabelle" –> "grüne Taste" –> "Kanaleinstellungen ändern" aufrufen.
Sie können zwischen "autom.", "Mono", "Mono B" und "Mono C" wählen.
Mono B = Orginalton
Mono C = Bei Digitalem Ton-Empfang (Nicam).

# Service and Special Functions

| | |
|---|---|
| Call up the Service Menu: | Button "**i**" (EASY DIALOG) |
| Call up the dialogue line: | Buttons "**P+**" or "**P-**" –> "OK" |
| Changing the setting in the dialogue line: | Buttons "**L+**" or "**L-**" –> "OK" |
| Back to previous menu: | "**Blue**" button |
| Exit menu: | "**i**" button |
| Service menu for retailer (code number) | 8500 |

**1. Switching-on Options**

**1.1 ATS Reset**
Press mains button "ON " while holding down the "**-**" button on the TV set.
- The basic analogue values are loaded.
- The ATS bit is set. When switching on the next time, this option releases the ATS euro plus function. The existing settings "Language", "Country" and "Programme Chart" remain unchanged.

**1.2 ATS Start**
Start the Auto Tuning System via "Adjust language on screen" –> "Adjust country" –> Satellite (optional).
The ATS explores the frequencies in ascending order, indicating the channels.
When setting the country F or *others, the display mode can be changed optionally to indicate either the channel or the frequency.

The ATS system determines the channels with station identification and stores them in the station table.
A pressure on the "OK" button ends the AT search. The ATS bit is not reset.
Resetting the ATS bit without changing the existing channel table:
After ending the channel search with "OK", select channel entry in the channel table, enter the indicated channel again then confirm with "OK".
After storing this setting, the ATS bit is reset.

**1.3 Memory Allocation CIC38091 (SAT module)**
- SAT ident, video data (deviation, H/V), audio frequencies "High" and "Low"
- Peri, finetuning, channel number
- Luminance, noise, TV standard, text/menu
- Volume fine, sound peak
- Station ident
- LNC frequency

**1.4 Electronic Programme Lock (parental lock)**
Enter the key sequence "7 0 3 8 5 8 0" to cancel your personal code number.

**1.5 Software Version Number**
Call up the "EASY DIALOG" menu. Pressing the "green" button displays the software version number of the TV set.

**1.6 Flash Programming**
**Required equipment**
SERVICE Toolbox GSI, material number 772004001200

**A description for updating the software of the TV set including the software download is contained in the description (CD) of the „SERVICE Toolbox“ supplied.**

**1.7 PIP Position (only with PIP module)**
Press and hold down the "PIP" button on the remote control while switching the set on with the mains switch. This activates the PIP mode.
Adjust the horizontal and vertical position.
Using the Format button, you can change the upper right/left and bottom right/left PIP position.
Press "OK" to save the position.
**Note:** It is not possible to display VGA or RGB signals as PIP picture.

**1.8 Service Mode Programme** (for fault finding on the $I^2C$ bus)
These error messages refer only to interferences on the $I^2C$ bus, that is, to modules or circuits which do not return an acknowledgement via the $I^2C$ bus, e.g. no operating voltage supplied to the module, break in the circuit path, or $I^2C$ interface defective.

### 1.8.1 I²C Bus, IC Test

In this fault finding programme, the CIC80050 processor scans the individual modules or circuits connected to the I²C bus and indicates them as countable flashing sequence on the LED of the keyboard control unit.

Press and hold down "P+" on the remote control and switch the TV set on with the mains button.

The number of flashing pulses indicates the defective module according to the table.
Flashing sequence example:

red LED flashes quickly for 10s
yellow LED lights for 4s
green LED flashes (e.g. 2 times) = tens's place (2)

green LED lights for 4s
green LED flashes (e.g. 8 times) = units's place (8)

Result = 28

With the "L+" button on the remote control it is possible to find out further defective interfaces.

| IC designation | Flashing frequency | Defective module/ integrated circuit |
|---|---|---|
| CIC31010 | 1 | Signal Module |
| CIC70200 | 2 | Feature Module |
| CIC70250 | 3 | Feature Module |
| CIC70300 | 4 | Feature Module |
| CIC33010 | 5 | Signal Module |
| IC43140 | 6 | Signal Module |
| TUNER | 7 | Signal Module |
| CIC32040 | 8 | Signal Module |

## 2. Special Functions in the "Installation" Menu

### 2.1 Entry of Letters

Call up the "Letter entry" menu via "EASY DIALOG" –> "Installation" –> "Special functions".
You may select between "off", "on" and "mix" for the programme selection letter entry.

### 2.2 Visible or Unvisible "Sound scale" for all Programmes

Call up the "Sound scale" menu via "EASY DIALOG" –> "Installation" –> "Special functions".
With "off" selected, no volume bar is displayed.

### 2.3 Switch on with Programme "1", or automatically

Call up the "Switch on " menu via "EASY DIALOG" –> "Installation" –> "Special functions" .
Set the option "Programme position 1" or "automatic".
With the "automatc" setting, the programme position selected when switching off is selected again when switching the set on again (Last station memory).

### 2.4 "Megalogic info" (only if the Megalogic feature is identified)

Call up the "Megalogic info" menu via "EASY DIALOG" –> "Installation" –> "Special functions".
The Megalogic´control can be switched to "on" or "off".

### 2.5 Status Display

Call up the "Status display" menu via "EASY DIALOG" –> "Installation" –> "Special functions".
You may select the position (top or bottom) where the information about the sound mode and the picture format is displayed.
With the "off" option, no information is displayed when changing the programme.

### 2.6 Automatic Volume

Call up the "Autom.volume" menu via "EASY DIALOG" –> "Installation" –> "Special functions".
In the "ON" position, the sound IC regulates the volume internally to the normal value (e.g. increased deviation in the case of advertising).

### 2.7 Noise Reduction P1…99 or P1…199 (with SAT module)

Call up the "Noise reduction P. 1…99" menu via "EASY DIALOG" –> "Installation" –> "Special functions. For the **programmes 1…99** or 1…199 you may set the noise reduction to "off", "low" or "automatic". With the "manual" setting, the display indicates that one or several programmes have different settings.

### 2.8 Picture Sharpness P1…99 or P1…199 (with SAT module)

Call up the "Sharpness" menu via "EASY DIALOG" –> "Installation" –> "Special functions" (to page 2).
The picture sharpness is set for all programmes.

### 2.9 Colour Match

Call up the "Colour match" menu via "EASY DIALOG" –> "Installation" –> "Special functions" (to page 2).
The colour match (luma delay) is set for every programme.
On sets with PIP module, the colour match for the PIP picture can be set individually.
(see Alignment, Point 6).

### 2.10 Rotation

Call up the "Rotation" menu via "EASY DIALOG" –> "Installation" –> "Special functions".
Adjust the display angle of the picture with respect to the picture to zero.

## 3. Format Switching

### 3.1 Format Switching with Evaluation of the Switching Voltage

Depending on the voltage present on Pin 8 of the active EURO-AV socket, the set adjusts the picture format. In AV mode, the picture format switching is active for the AV socket (AV 1, AV 2, AV 3).

With 16:9 picture tubes

| Picture format before voltage change | New picture format after Pin 8: 0/12V –> 6V | New picture format after Pin 8: 6V –> 0/12V |
|---|---|---|
| 16:9 | - | old format * |
| Cinema Zoom | 16:9 | old format* |
| Panorama Zoom | 16:9 | old format * |
| 4:3 | 16:9 | old format* * |

With 4:3 picture tubes

| Picture format before voltage change | New picture format after Pin 8: 0/12V –> 6V | New picture format after Pin 8: 6V –> 0/12V |
|---|---|---|
| 16:9 | - | old format * |
| 4:3 | 16:9 | old format * |
| Panorama Zoom | 16:9 | old format * |

* old format means the format adjusted manually before the last voltage change.

## 4. Service Settings for the Retailer

### 4.1 Picture Screen Geometry

Call up the "Screen geometry" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> "8500".
Align the geometry test pattern beginning with the vertical alignment (see alignment point 12).

### 4.2 Picture Settings

### 4.2.1 White Balance

Call up the "White balance" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> "8500" –> "Picture settings".
Adjust the values for "red", "green" and "blue" so that a white picture is obtained. (See Alignment, Point 9).

### 4.2.2 Switching the Blue Screen Background On and Off

Call up the "Blue screen" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> "8500" –> "Picture settings".
Select "on" or "off".

### 4.3 Hardware Settings

### 4.3.1 Picture Tube Type

Call up the "Tube type" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –> "Hardware settings".
Select the appropriate picture tube type.

#### 4.3.2 IF Type
Call up the "IF Type" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –> "Hardware settings".
After replacing the NVM on the Signal module, it is necessary to adjust the IF type:
Inland sets: National
Multi-8 sets: Multi 8
Multi-9 sets: Multi 9
(see Alignment, Point 16).

#### 4.3.3 Terr. Tuner
Call up the "Terr. Tuner" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –> "Hardware settings".
Select the appropriate tuner type.
(see Alignment, Point 2).

#### 4.3.4 Remote Control
Call up the "Remote control" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –> "Hardware settings".
Select the appropriate remote control type.

#### 4.3.5 Hosiden Socket
Call up the "Hosiden socket" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –> "Hardware settings".
Select "yes" or "no".

#### 4.3.6 Subwoofer
Call up the "Subwoofer" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –>"Hardware settings".
Select "yes" or "no".

#### 4.3.7 Wireless loudspeaker module
The settings for the wireless loudspeaker module are described in the Mounting Instructions "WT 2" (720100430000).

### 4.4 Special Functions

#### 4.4.1 Watchdog On/Off
Call up the "Watchdog" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> "8500" –> "Special functions".
If the Watchdog timer is not reset in regular intervals, a new start is initialized.
Set the Watchdog to "off" or "on".

#### 4.4.2 IR Data Programmer (only with terrestrial module)
Call up the "IR-Dataprogrammer" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> "8500" –> "Special functions".
Using the "OK" button, it is possible to store up to 99 programme positions with data for channel, TV standard, Peri, 6-position station name, centre fine tuning, and "0" volume offset, with the help of the IR data programmer.

#### 4.4.3 AGC Setting
Feed in a standard channel raster without finetuning in band 1.
Call up the "AGC setting" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –> "Special functions".
(See Alignment, Point 3).

#### 4.4.4 Cancel the EPG Flash
Call up the "Cancel EPG flash" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –> "Special functions".
Pressing the "OK" button will cancel the EPG Flash.

#### 4.4.5 Videotext Level 2.5 Support
Call up the "Videotext level 2.5" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –> "Special functions".
Select "yes" or "no".

#### 4.4.6 SAT Preprogramming (only with a SAT module fitted)
Call up the "SAT preprogramming" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –> "Special functions".
Press "OK" for confirmation. This transfers the stored SAT station table to the SAT module.

#### 4.4.7 Recognized SPDIF Signal
The menu "Recognized SPDIF signal" **cannot** be called up via "EASY DIALOG" –> "Installation" –> "Service menu for the authorized retailer" –> Code number "8500" –> "Special functions". It serves only for the indication of the SPDIF signal.
The following options can be displayed:

| | |
|---|---|
| Not decodable | MPEG Layer 2 |
| Incorrect signal | Dolby Digital 2-channels |
| Unknown signal | Dolby Digital 1/0 |
| Clock signal | Dolby Digital 2/0 |
| Noise generator | Dolby Digital 3/0 |
| No digital data stream | Dolby Digital 2/1 |
| PCM data | Dolby Digital 3/1 |
| PCM audio | Dolby Digital 2/2 |
| DTS | Dolby Digital 3/2 |

#### 4.4.8 DVD Settings
The DVD settings are described in the Service Manual "DVD-KIT1" (720100424000).

## 5. Sound Settings
Press the "blue" button to call up the "Sound settings" menu.
The settings "Voice", "Music", or manual can be selected in the "Presettings" menu.
The "manual" setting allows you to adjust the sound to suit your taste.
For the other settings, specific values are preprogrammed.

## 6. Picture Settings
Press the "red" button to call up the "Picture settings" menu.
In the "Presettings " menu, the settings "During the day", "In the evening", and "manual" can be selected.
With the "manual" option, you may set the contrast and the picture sharpness. For the other settings, specific values are preprogrammed.

## 7. Settings via the Channel Allocation

### 7.1 Forced Settings in Programme Mode
Call up the "Sound channel" menu via "EASY DIALOG" –> "Programme chart" –> "green button" –> "Change channel settings".
You may select between "autom.", "Mono", "Mono B" and "Mono C".
Mono B = Original sound track
Mono C = For digital sound reception (Nicam).

# Abgleich

Alle nicht beschriebenen Einstellelemente sind werkseitig abgeglichen und dürfen im Servicefall nicht verstellt werden.

Aufruf des Service-Menüs: Taste "**i**" (EASY DIALOG)
Aufruf der Dialogzeile: Tasten "**P+**" oder "**P-**" –> "OK"
Einstellung in der Dialogzeile ändern: Tasten "**L+**" oder "**L-**" –> "OK"
Zurück ins vorherige Menü: "**blaue**" Taste
Beenden des Menüs: Taste "**i**"
Servicemenü für Händler (Codezahl): "**8500**"

**Messgeräte:** 100MHz Oszilloskop mit Tastkopf 10:1, Digitalvoltmeter, Farbbildgenerator, Service Toolbox

**Servicearbeiten nach Austausch bzw. Reparatur:**
- **Chassis:** Abgleich 1
- **Signal-Baustein:** Abgleich 2, 3
- **CIC31010** (Signal-Baustein)**:** Abgleich 2, 3, 16
- **PIP/Signal-Baustein:** Abgleich 4, 5
- **CIC80230** (Feature-Modul)**:** Abgleich 6…12, 16, 17
- **Zeilenablenkung:** Abgleich 13, 14, (15)

| Abgleich | Vorbereitung | Abgleichvorgang |
|---|---|---|
| 1. **+A** Spannung | **Nach jeder Reparatur und vor jedem Abgleich unbedingt kontrollieren und gegebenenfalls einstellen.**<br>Digitalvoltmeter**:** D61516 / Kathode<br>Helligkeit: Minimum | Mit Regler **R61508** auf Wert nach Tabelle (Seite 59, 60) einstellen. |
| 2. Terr. Tuner-Typ | Das Menü "Terr. Tuner" über "EASY DIALOG" –> "Installation" –> "Servicemenü für Händler" –> Kennzahl "8500" –> "Hardware-Einstellungen" aufrufen. | Auf den im Gerät **eingebauten Tuner** einstellen. |
| 3. Tuner-AGC (Signalbaustein) | 100MHz-Oszilloskop an Tunerkontakt 10 oder 11 gegen Tunermasse anschließen.<br>Testbild (mit abgeschaltetem Tonträger) über die Antenne einspeisen, 70…80dBµV.<br>Das Menü "AGC-Einstellung" über "EASY DIALOG " –> "Installation" (Zur Seite 2) –> "Servicemenü für Händler" –> "8500" –> "Sonderfunktionen" aufrufen. | Auf **300-350mV$_{ss}$** einstellen. |
| 4. Tuner-AGC/PIP (PIP/Signalbaustein) | 100MHz-Oszilloskop an Tunerkontakt 10 oder 11 gegen Tunermasse anschließen.<br>Farbbildgenerator: Testbild (mit abgeschaltetem Tonträger) über die Antenne einspeisen, 70…80dBµV.<br>PIP-Bild einblenden. | Mit RV-Regler **R32122** auf dem PIP/Signalbaustein (295042120400) **300-350mV$_{ss}$** einstellen. |
| 5. PLL-Demodulatorkreis für Bildträger 38,9MHz (PIP/Signalbaustein) | Sendersignal mit genormtem Kanalraster, Band 1 (B/G) einspeisen.<br>Gerät auf Sender abstimmen, Feintuning muss "00" sein.<br>PIP-Bild einblenden.<br>Voltmeter: IC32110-22<br>Voltmeter: IC32110-11 | Genaue Betriebsspannung **UB** ermitteln.<br>Halbe Betriebsspannung **UB/2** mit **F32085** auf dem PIP/Signalbaustein (295042120400) einstellen. |
| PLL-Demodulatorkreis für Bildträger 33,4MHz (PIP/Signalbaustein) | Sendersignal mit genormtem Kanalraster, Band 1 (L`) einspeisen.<br>Gerät auf Sender abstimmen, Feintuning muss "00" sein.<br>PIP-Bild einblenden.<br>Voltmeter: IC32110-22<br>Voltmeter: IC32110-11 | Genaue Betriebsspannung **UB** ermitteln.<br>Halbe Betriebsspannung **UB/2** mit **R32334** auf dem PIP/Signalbaustein (295042120400) einstellen. |
| 6. Farbdeckung | Das Menü "Farbdeckung" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" (Zur Seite 2) aufrufen. | Eventuelle Laufzeitunterschiede zwischen Y und Chroma optimieren. Die **Programme 1…199** werden dabei **gleichzeitig** optimiert. |
| 7. Rauschreduktion programmplatzbezogen | Das Menü "Rauschreduktion" über "EASY DIALOG" –> "Einstellungen" –> "Bild" (Zur Seite 2) aufrufen. | Die Rauschreduktion ("aus", "gering", "automatisch", "stark") **programmplatzbezogen** einstellen. |
| Programme 1…199 | Das Menü "Rauschreduktion P. 1…199" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" aufrufen. | Die Rauschreduktion für die **Programme 1…199 gleichzeitig** auf ("manuell", "aus", "gering", "automatisch") stellen. |

| Abgleich | Vorbereitung | Abgleichvorgang |
|---|---|---|
| 8. Bildschärfe | Das Menü "Bildschärfe P. 1…199" über "EASY DIALOG" –> "Installation" –> "Sonderfunktionen" (Zur Seite 2) aufrufen. | Bild auf beste Schärfe ("manuell" oder "0…3") einstellen. Die **Programme 1…199** werden dabei **gleichzeitig** eingestellt. |
| 9. Weißwert | Grautreppe mit Burst einspeisen.<br>Weißbalance: Mittenstellung<br>Kontrast: Maximum<br>Farbkontrast: Mittelwert<br>Bildschirmhelligkeit: Mittelwert<br><br>Das Menü "Weißabgleich" über "EASY DIALOG" –> "Installation" (Zur Seite 2) –> "Servicemenü für Händler" –> "8500" –> "Bildeinstellungen" aufrufen. | Die Werte für **rot, grün** und **blau** so einstellen, dass das Bild unbunt wird. |
| 10. Bildröhrentyp | Das Menü "Bildröhrentyp" über "EASY DIALOG" –> "Installation" (Zur Seite 2) –> "Servicemenü für Händler" –> "8500" –> "Hardware-Einstellungen" aufrufen. | Bildröhrentyp (T=Toshiba, P=Philips, V=Videocolor) einstellen.<br>(Diese Einstellung geht auf den Spitzenstrahlstrom ein). |
| 11. PIP-Position | Senderbild einspeisen.<br>Fernbedientaste "PIP" gedrückt halten und mit dem Netzschalter einschalten. | Die vertikale und horizontale PIP-Position so einstellen, dass das Kleinbild nicht vom Bildrand begrenzt wird. |
| 12. Bildgeometrie | Das Menü "Bildschirmgeometrie" über "EASY DIALOG" –> "Installation" (Zur Seite 2) –> "Servicemenü für Händler" –> "8500" aufrufen.<br>Geometrietestbild einspeisen.<br><br>**Achtung:** Der Abgleich "Horiz. Pos." beeinflußt die Zeilenphase. Vor dieser Einstellung die Bildbreite auf Minimum stellen und evtl. die Rasterlage mit dem Stecker "H-Shift" korrigieren.<br><br>**Reset:** Das Feld "Reset" enthält:<br>- entweder die optimalen Bildgeometriedaten des Gerätes aus der Fertigung.<br>- oder einen mittleren Datensatz aus dem ROM, wenn das Gerät mit dem Notdatensatz gestartet wurde.<br><br>Nach einem Fehlabgleich können Sie diese Grundwerte jederzeit wieder laden:<br>Das Menü "Reset" über "EASY DIALOG " –> "Installation" (Zur Seite 2) –> "Servicemenü für Händler" –> "8500" –> Bildschirmgeometrie aufrufen. | Nacheinander über die Menüführung die Geometriewerte der Vertikal- danach die Einstellung der Horizontalablenkung vornehmen.<br><br>Erst danach Bildinhalt mittig ins Raster stellen. Bildbreite wieder nach Testbild einstellen.<br><br>**Speichern:**<br>Der eingestellte Wert wird durch Drücken der "gelben" Taste gespeichert.<br>Die Bildgeometrie stellt sich nach jedem Einschalten auf den zuletzt abgespeicherten Wert ein. |
| Bildgeometrie VGA | Gerät in Programmstellung "AV5" schalten und Geometriebild über die VGA-Buchse einspeisen.<br>Das Menü "Reset" über "EASY DIALOG " –> "Installation" (Zur Seite 2) –> "Servicemenü für Händler" –> "8500" –> Bildschirmgeometrie aufrufen. | Über die Menüführung Geometrie überprüfen und gegebenenfalls abgleichen.<br><br>**Speichern:**<br>Der eingestellte Wert wird durch Drücken der "gelben" Taste gespeichert.<br>Die Bildgeometrie stellt sich nach jedem Einschalten auf den zuletzt abgespeicherten Wert ein. |
| Bildgeometrie TeleWeb | Das Menü "TeleWeb" über "EASY DIALOG" –> "Installation" –> "TeleWeb" –> "TeleWeb" aufrufen.<br>Auf "ein" stellen.<br>Das Menü "Installation – Servicemenü für Händler" über "EASY DIALOG " –> "Installation" (Zur Seite 2) –> "Servicemenü für Händler" –> "8500" aufrufen und mit der Taste "i" wieder verlassen.<br>Das Menü "Bildgeometrie" über "EASY DIALOG" –> "Infothek" –> "TeleWeb" –> Bildformatumschalt-Taste "⊡" aufrufen.<br><br>**Beenden des Geometrieabgleichs:**<br>Mit der Taste "i" das Menü "TeleWeb-Funktionen" aufrufen und über Menü-Punkt "Beenden" verlassen. | Über die Menüführung Geometrie, mit Hilfe des eingeblendeten Geometrie-Testbildes die Geometrie überprüfen und gegebenenfalls abgleichen.<br><br>**Speichern:**<br>Der eingestellte Wert wird durch Drücken der "gelben" Taste gespeichert.<br>Die Bildgeometrie stellt sich nach jedem Einschalten auf den zuletzt abgespeicherten Wert ein. |

| Abgleich | Vorbereitung | Abgleichvorgang |
|---|---|---|
| 13. Zeilenschärfe (Geräte ohne Fokus-Block) | Konvergenztestbild einspeisen.<br>Bildformat bei 16:9-Geräten auf 16:9 stellen.<br>Kontrast: Maximum<br>Helligkeit so einstellen, dass sich der schwarze Testbild-hintergrund gerade aufhellt. | Mit dem Schärferegler **FOC** auf der Bildrohrplatte die vertikalen Linien ca. 5cm vom rechten und linken Bildrand auf kleinste horizontale Breite einstellen. |
| Zeilenschärfe (Geräte mit Fokussierungs-platte) | Konvergenztestbild einspeisen.<br>Bildformat bei 16:9-Geräten auf 16:9 stellen.<br>Kontrast: Maximum<br>Helligkeit so einstellen, dass sich der schwarze Testbild-hintergrund gerade aufhellt. | Mit dem Schärferegler **FOC** auf der Bildrohrplatte die horizontalen Linien in Bildmitte auf kleinste vertikale Breite einstellen.<br>Dann mit Schärferegler auf der Fokussierungsplatte die vertikalen Linien ca. 5cm vom rechten und linken Bildrand auf kleinste horizontale Breite einstellen. |
| Zeilenschärfe (Geräte mit Fokus-Block) | Konvergenztestbild einspeisen.<br>Bildformat bei 16:9-Geräten auf 16:9 stellen.<br>Kontrast: Maximum<br>Helligkeit so einstellen, dass sich der schwarze Testbild-hintergrund gerade aufhellt. | Mit dem Schärferegler **FOCUS 1** auf dem Fokus-Block die horizontalen Linien in Bildmitte auf kleinste vertikale Breite einstellen.<br>Die obere Randschärfe darf nicht schlechter als die Mitten-schärfe erscheinen, gegebenenfalls mitteln.<br>Dann mit Fokusregler **FOCUS 2** auf dem Fokus-Block die vertikalen Linien ca. 5cm vom rechten und linken Bildrand auf kleinste horizontale Breite einstellen. |
| 14. Schirmgitter-spannung $\mathbf{U_{SG}}$ | Schwarzbild einspeisen.<br>Bildschirmhelligkeit so einstellen, dass die Graufläche gerade dunkel wird.<br>Gerät auf AV-Betrieb schalten.<br>Hochohmiges Voltmeter: Testpunkt R, G, B (Bildrohrplatte)<br>Testpunkt mit höchstem Spannungwert ermitteln. | Geräte ohne Fokus-Block:<br>Mit dem Einstellregler **SG** (rechter Einsteller der Regler-einheit) auf der Bildrohrplatte **170V±2,5V** abgleichen.<br><br>Geräte mit Fokus-Block:<br>Mit dem Regler **"SCREEN"** (unterer Regler auf Fokus-Block) **170V±2,5V** abgleichen. |
| 15. Abgleich der Brückenspule L53574 | Die Brückenspule L53574 wird in der Fertigung abgeglichen und sollte nicht verdreht werden.<br><br>Das Menü "Bildschirmgeometrie" über "EASY DIALOG" –> "Installation" (Zur Seite 2) –> "Servicemenü für Händler" –> "8500" aufrufen.<br>Die Bildbreite (Width) auf Minimum stellen.<br>Oszilloskop Kanal 1: Kollektor T53501<br>Oszilloskop Kanal 2: Kathode D53572 | Gleiche Impulsbreite der Oszillogramme kontrollieren und gegebenenfalls mit Spule **L53574** abgleichen.<br>Bildbreite wieder nach Testbild einstellen. |
| 16. ZF-Typ | Das Menü "ZF-Typ" über "EASY DIALOG" –> "Installation" (Zur Seite 2) –> "Servicemenü für Händler" –> "8500" –> "Hardware-Einstellungen" aufrufen. | Auf im Gerät eingebauten ZF-Typ einstellen.<br>Inland, Multi 8 oder Multi 9. |
| 17. OSD Layout | Das Menü "OSD Layout" über "EASY DIALOG" –> "Instal-lation" –> "Servicemenü für Händler" –> "8500" –> "Sonder-funktionen" aufrufen. | OSD Layout auf "grün" stellen. |

# Alignment

All adjustment controls not mentioned in this description are adjusted during production and must not be re-adjusted in the case of repairs.

Call up the service menu: Button "**i**" (EASY DIALOG)
Call up the dialogue line: Buttons "**P+**" or "**P-**" –> "OK"
Change setting in the dialogue line: Buttons "**L+**" or "**L-**" –> "OK"
Back to previous menu: "**blue**" button
Exit menu: Button "**i**"
Service menu for the dealer (code no.): "**8500**"

**Measuring instruments:** 100MHz oscilloscope with 10:1 test probe, digital voltmeter, colour test pattern generator, Service Toolbox

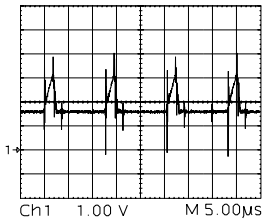
**Checks and adjustments after replacement or repair of:**
- **Chassis:** alignment 1
- **Signal module:** alignment 2, 3
- **CIC31010** (signal module)**:** alignment 2, 3, 16
- **PIP/signal module:** alignment 4, 5
- **CIC80230** (feature module)**:** alignment 6…12, 16, 17
- **Horizontal deflection:** alignment 13, 14, (15)

| Alignment | Preparations | Alignment procedure |
|---|---|---|
| 1. **+A** voltage | **It is absolutely necessary to check and re-adjust these voltages if necessary after every repair and before every alignment.**<br>Digital voltmeter**:** D61516 / cathode<br>Brightness: Minimum | Use the **R61508** control to adjust the value according to the table (page 59, 60). |
| 2. Terr. Tuner Typ | Call up the "Terr. Tuner" menu via "EASY DIALOG" –> "Installation" –> "Only for the retailer" –> Code number "8500" –> "Hardware settings". | Select the **appropriate tuner type**. |
| 3. Tuner AGC (signal module) | Connect the 100MHz oscilloscope to the tuner contact 10 or 11 and to tuner ground.<br>Feed in a test pattern (sound carrier switched off) via the aerial, 70…80dBµV.<br>Call up the "AGC setting" menu via "EASY DIALOG " –> "Installation" (to page 2) –> "Dealer service menu" –> "8500" –> "Special functions". | Set to **300-350mV$_{pp}$**. |
| 4. Tuner AGC/PIP (PIP/signal module) | Connect the 100MHz oscilloscope to the tuner contact 10 or 11 and to tuner ground.<br>Feed in a test pattern (with sound carrier switched off) via the aerial, 70…80dBµV.<br>Display a PIP picture. | Use the RV **R32122** control to set **300-350mV$_{pp}$** on the PIP/signal module (295042120400). |
| 5. PLL demodulator circuit for 38.9MHz picture carrier (PIP/signal module) | Feed in a transmitter signal with standard channel spacing, Band 1 (B/G).<br>Tune the set to a transmitter with "00" finetuning.<br>Display a PIP picture.<br>Voltmeter: IC32110-22<br><br>Voltmeter: IC32110-11 | Determine the exact operating voltage **UB**.<br><br>Set half the operating voltage **UB/2** with **F32085** on the PIP/signal module (295042120400). |
| PLL demodulator circuit for 33.4MHz picture carrier (PIP/signal module) | Feed in a transmitter signal with standard channel spacing, Band 1 (L`).<br>Tune the set to a transmitter with "00" finetuning.<br>Display a PIP picture.<br>Voltmeter: IC32110-22<br><br>Voltmeter: IC32110-11 | Determine the exact operating voltage **UB**.<br><br>Adjust half the operating voltage **UB/2** with **R32334** on the PIP/signal module (295042120400). |
| 6. Colour match | Call up the "Colour match" menu via "EASY DIALOG" –> "Installation" –> "Special functions" (to page 2). | Optimize existing run time differences between the Y and chroma signals. The **channel positions 1…199** are optimized **at the same time**. |
| 7. Channel position-related noise reduction<br><br>Programme positions 1…199 | Call up the "Noise reduction" menu via "EASY DIALOG" –> "Settings" –> "Picture" (to page 2) .<br><br>Call up the "Noise reduction P. 1…199" menu via "EASY DIALOG" –> "Installation" –> "Special functions". | Set the noise reduction ("off", "low", "automatic", "high") **for every channel position**.<br><br>Set the noise reduction ("manual", "off", "low", "automatic") **for the channel positions 1…199 at the same time**. |

| Alignment | Preparations | Alignment procedure |
|---|---|---|
| 8. Picture sharpness | Call up the "Picture sharpness P. 1…199" menu via "EASY DIALOG" –> "Installation" –> "Special functions" (to page 2). | Adjust picture for best sharpness ("manual" or "0…3"). The **channel positions 1…199** are adjusted **at the same time**. |
| 9. White level | Feed in a grey scale test pattern with burst.<br>White balance: Central position<br>Contrast: Maximum<br>Colour contrast: Mean value<br>Screen brighness: Mean value<br><br>Call up the "White level alignment" menu via "EASY DIALOG" –> "Installation" (to page 2) –> "Dealer service menu" –> "8500" –> "Picture settings". | Adjust the values for **red, green** and **blue** so that the picture becomes achromatic. |
| 10. Picture tube type | Call up the "Picture tube type" menu via "EASY DIALOG" –> "Installation" (to page 2 / option) –> "Dealer service menu" –> "8500" –> "Special functions". | Set the picture type (T=Toshiba, P=Philips, V=Videocolor). (This effects the peak beam current). |
| 11. PIP position | Feed in a transmitter picture.<br>Press and hold down the "PIP" button while switching on with the mains switch. | Adjust the vertical and horizontal PIP position so that the small picture is not confined by the picture borders. |
| 12. Screen geometry | Call up the "Screen geometry" menu via "EASY DIALOG" –> "Installation" (to page 2) –> "Dealer service menu" –> "8500".<br>Feed in a geometry test pattern.<br><br>**Attention:** The "Horiz. Pos." alignment influences the horizontal phase. Prior to carrying out this adjustment, set the picture width to minimum and correct the lock-in position if necessary using the "H-Shift" plug.<br><br>**Reset:** The "Reset" field contains:<br>- either the optimum picture geometry data set at the factory,<br>- or an average data record from the ROM if the set has been started with the emergency data record.<br><br>After an incorrect alignment you may reload this basic data at any time:<br>Call up the "Reset" menu via "EASY DIALOG" –> "Installation" (to page 2) –> "Dealer service menu" –> "8500" –> "Screen geometry". | With the help of the user guide adjust the geometry values first for the vertical deflection and then for the horizontal deflection.<br><br>Only when this is done position the picture contents into the centre of the screen. Re-adjust the picture width according to the test pattern.<br><br>**Saving:**<br>The set value is saved by pressing the "yellow" button.<br>The picture geometry adjusts itself to the last saved value when switching the TV set on again. |
| Screen geometry VGA | Switch the set to channel position "AV5" and feed in a geometry test pattern via the VGA socket.<br>Call up the "Reset" menu via "EASY DIALOG" –> "Installation" (to page 2) –> "Dealer service menu" –> "8500" –> "Screen geometry". | Check the geometry via the menu guide and correct it if necessary.<br><br>**Saving:**<br>The set value is saved by pressing the "yellow" button.<br>The picture geometry adjusts itself to the last saved value when switching the TV set on again. |
| Screen geometry TeleWeb | Call up the "TeleWeb" menu via "EASY DIALOG" –> "Installation" –> "TeleWeb" –> "TeleWeb".<br>Select "On".<br>Call up the "Installation – Dealer service menu" menu via "EASY DIALOG" –> "Installation" (to page 2) –> "Dealer service menu" –> "8500", and exit the menu by pressing the "i" button.<br>Call up the "Screen geometry" menu via "EASY DIALOG" –> "Info" –> "TeleWeb" –> picture format button "⛶".<br><br>**Ending the geometry alignment:**<br>Use the "i" button to call up the "TeleWeb functions" menu, and exit the menu via the "Exit" menu item. | Following the Geometry menu guide and referring to the displayed geometry test pattern, check the picture geometry and align it if necessary.<br><br>**Saving:**<br>The set value is saved by pressing the "yellow" button.<br>The picture geometry adjusts itself to the last saved value when switching the TV set on again. |

| Alignment | Preparations | Alignment procedure |
|---|---|---|
| 13. Picture sharpness (TV sets without focus block) | Feed in a convergence test pattern.<br>On 16:9 units, set the picture format to 16:9.<br>Contrast: Maximum<br>Set the brightness so that the black test pattern background just brightens. | Use the **FOC** control on the picture tube panel to adjust the vertical lines about 5 cm to the right and left picture border for minimum horizontal width. |
| Line sharpness (TV sets with focus board) | Feed in a convergence test pattern.<br>On 16:9 units, set the picture format to 16:9.<br>Contrast: Maximum<br>Set the brightness so that the black test pattern background just brightens. | Use the **FOC** control on the picture tube panel to adjust the horizontal lines in the picture centre for minimum vertical width. When this is done, use the focus control on the focus board to adjust the vertical lines about 5 cm to the right and left picture border for minimum horizontal width. |
| Line sharpness (TV sets with focus block) | Feed in a convergence test pattern.<br>On 16:9 units, set the picture format to 16:9.<br>Contrast: Maximum<br>Set the brightness so that the black test pattern background just brightens. | Use the **FOCUS 1** control on the focus block to adjust the horizontal lines in the picture centre for minimum vertical width. The upper border sharpness must not be worse than the centre sharpness - set to average value if necessary. When this is done, use the **FOCUS 2** control on the focus block to adjust the vertical lines about 5 cm to the right and left picture border for minimum horizontal width. |
| 14. Screen grid voltage $\mathbf{U_{SG}}$ | Feed in a black raster.<br>Adjust the picture screen brightness so that the grey area just darkens.<br>Switch the unit to AV mode.<br>High-impedance voltmeter: Test point R, G, B (picture tube plate)<br>Determine the test point with the highest voltage level. | Units without focus block:<br>Use the **SG** control (right control on the regulating section) on the picture tube panel to adjust **170V±2.5V**.<br><br>Units with focus block:<br>Use the "**SCREEN**" control (bottom control on the focus block) to adjust **170V±2.5V**. |
| 15. Adjustment of the bridge coil L53574 | The bridge coil L53574 is adjusted during production and should not be re-adjusted any more.<br><br>Call up the "Screen geometry" menu via "EASY DIALOG" –> "Installation" (to page 2) –> "Dealer service menu" –> "8500".<br>Set the picture width to minimum.<br>Oscilloscope channel 1: collector T53501<br>Oscilloscope channel 2: cathode D53572 | Check for equal impulse width of the oscillograms and correct if necessary using the coil **L53574**.<br>Re-adjust the picture width according to the test pattern. |
| 16. IF-Type | Call up the "IF-Type" menu via "EASY DIALOG" –> "Installation" (to page 2) –> "Dealer service menu" –> "8500" –> "Hardware settings". | Adjust to IF Type built into the set.<br>National, Multi 8, Multi 9. |
| 17. OSD Layout | Call up the "OSD Layout" menu via "EASY DIALOG" –> "Installation" –> "Dealer service menu" –> "8500" –> "Special functions". | Set the OSD Layout to "**green**". |

# Oszillogramme Chassis / Oscillograms Chassis



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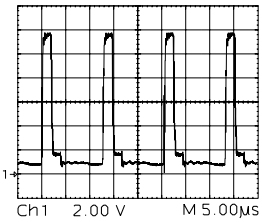

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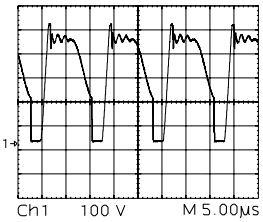

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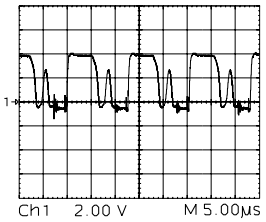

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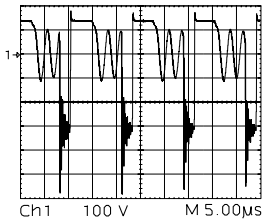

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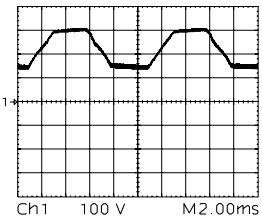

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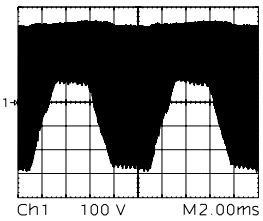

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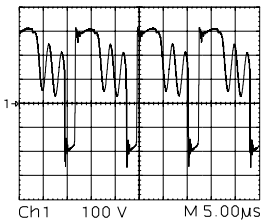

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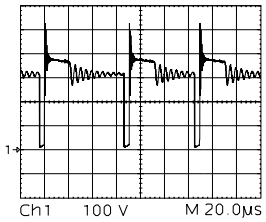

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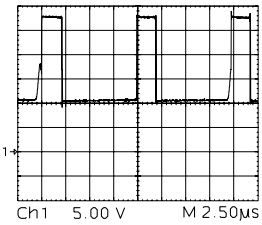

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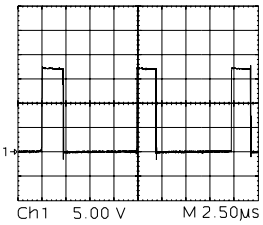

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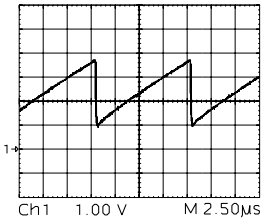

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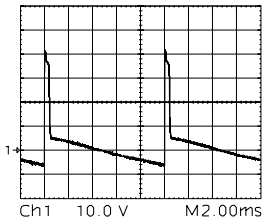

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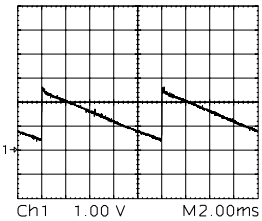

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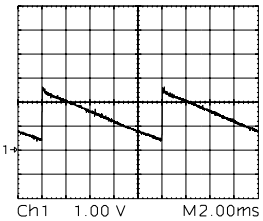

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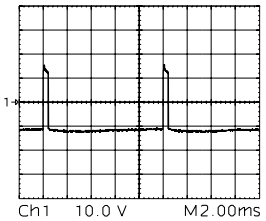

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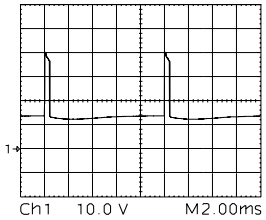

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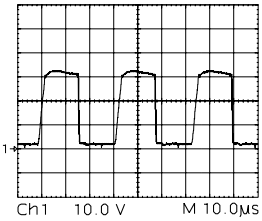

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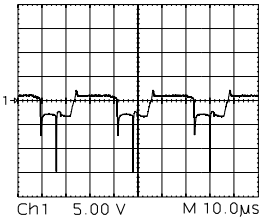

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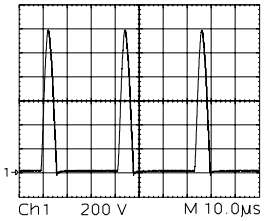

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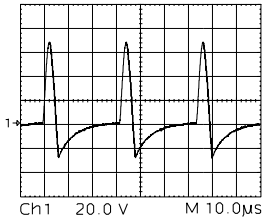

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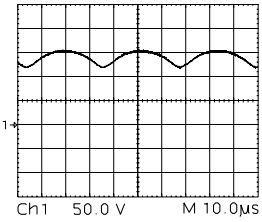

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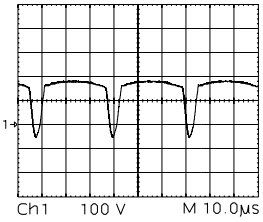

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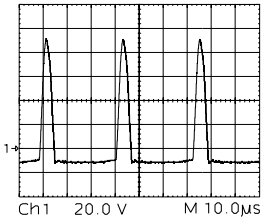

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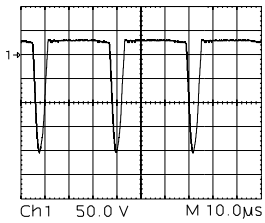

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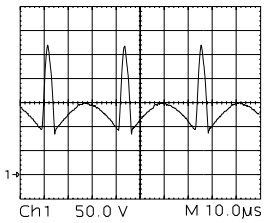

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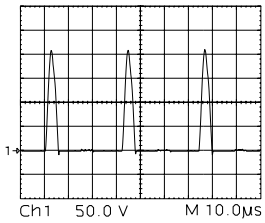

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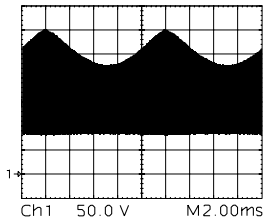

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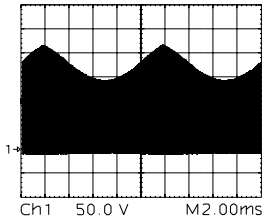

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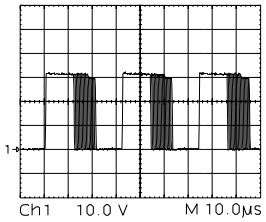

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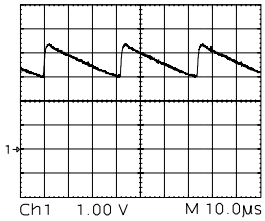

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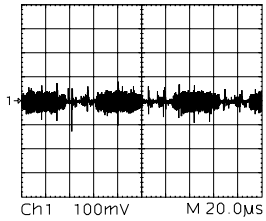

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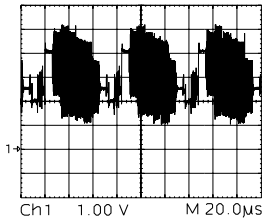

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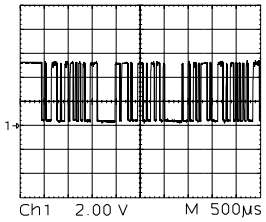

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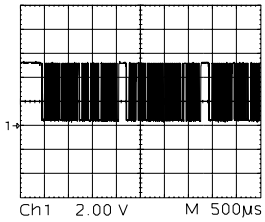

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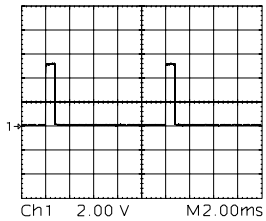

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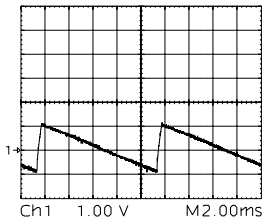

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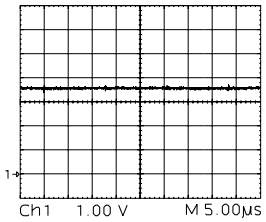

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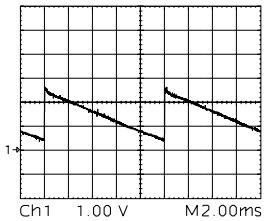

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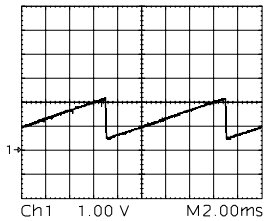

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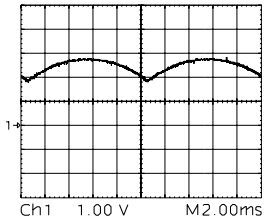

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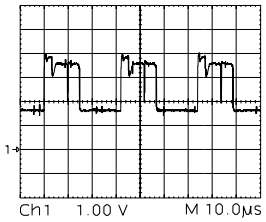

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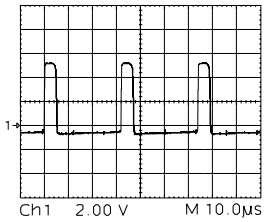
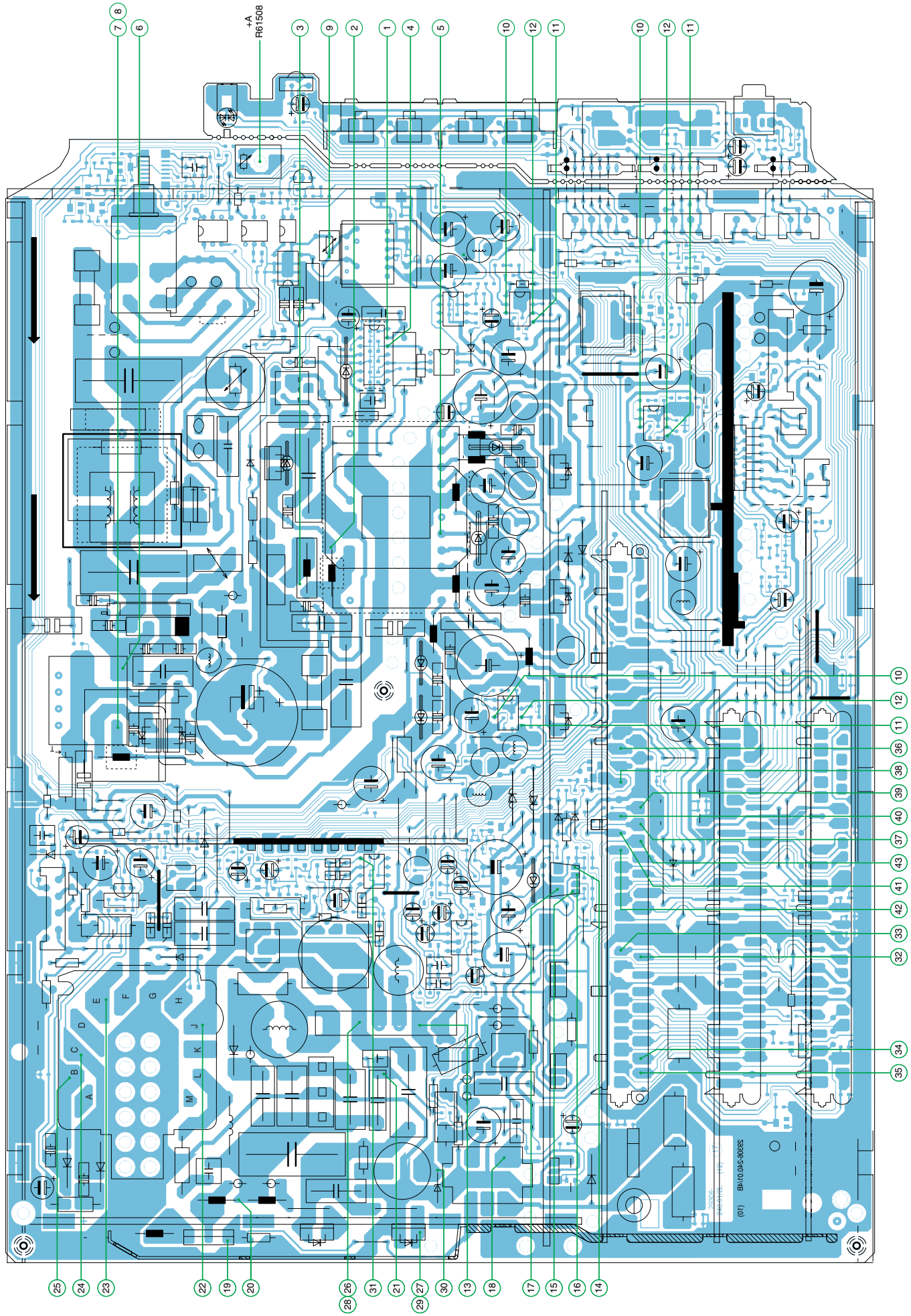


43

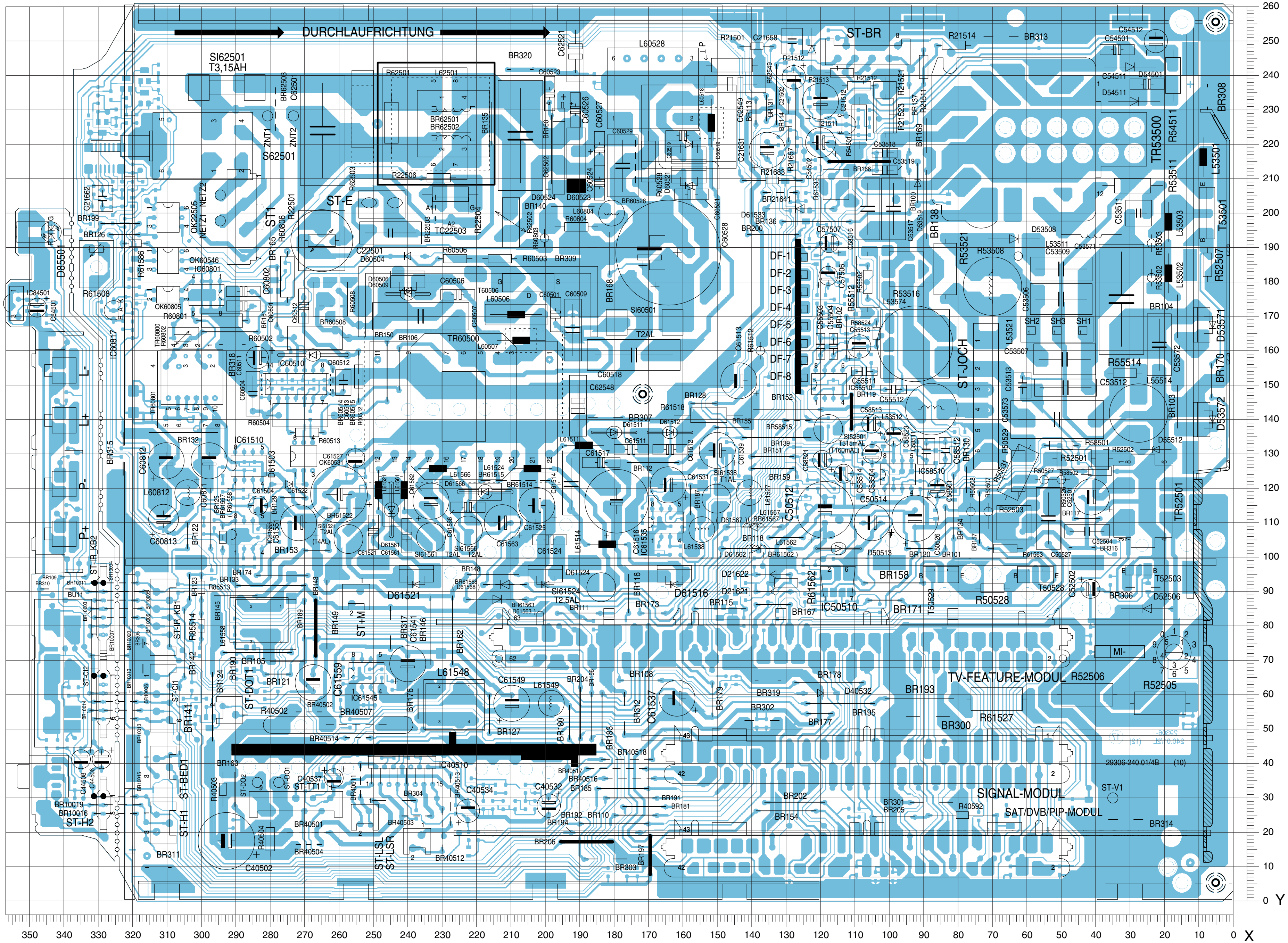
# Messpunkte (Chassis) / Testpoints (Chassis)

**Lötseite, Ansicht von unten / Solder Side, Bottom View**



# Chassisplatte / Chassis Board

## Bestückungsseite, Ansicht von oben / Component Side, Top View



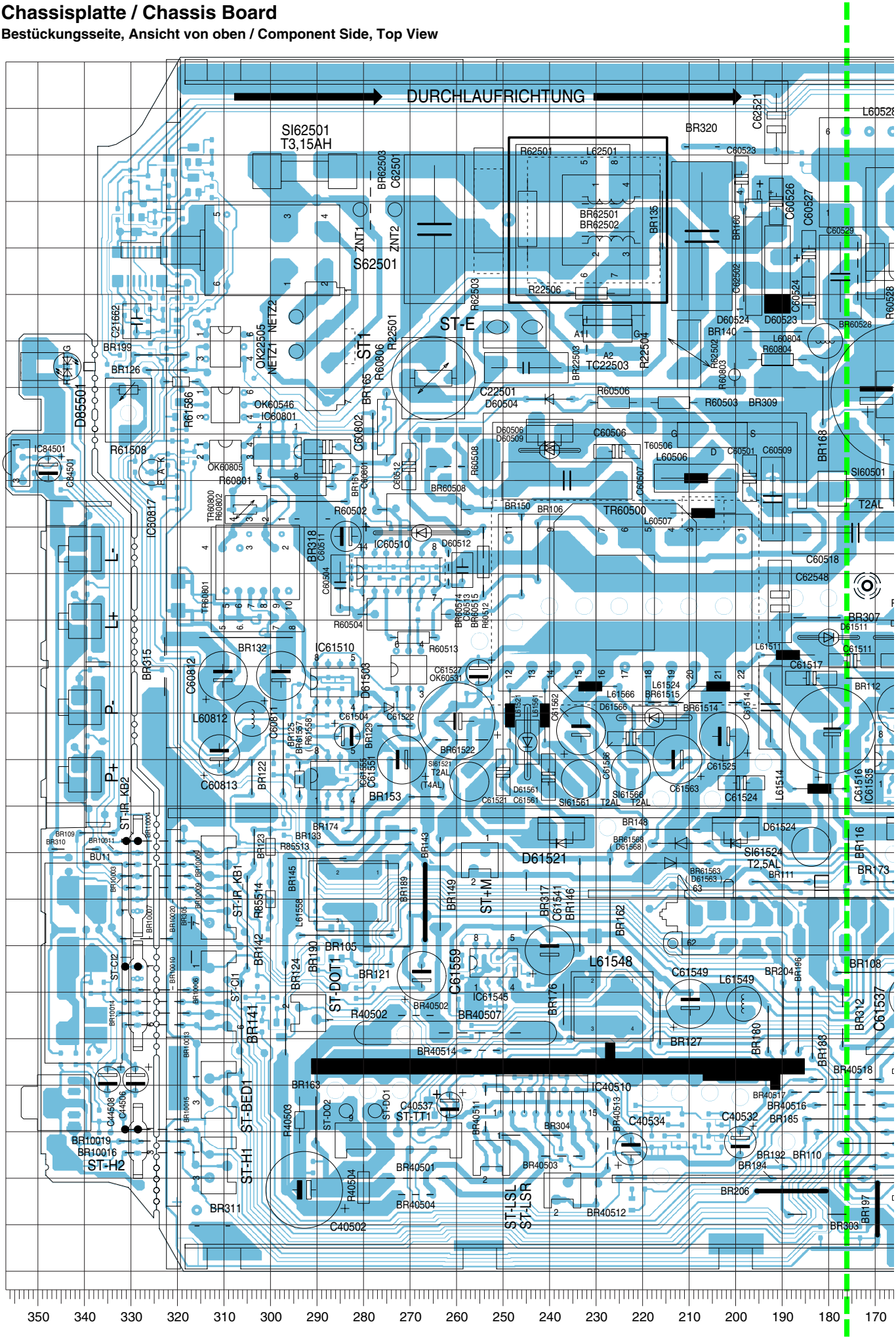
# Chassisplatte / Chassis Board

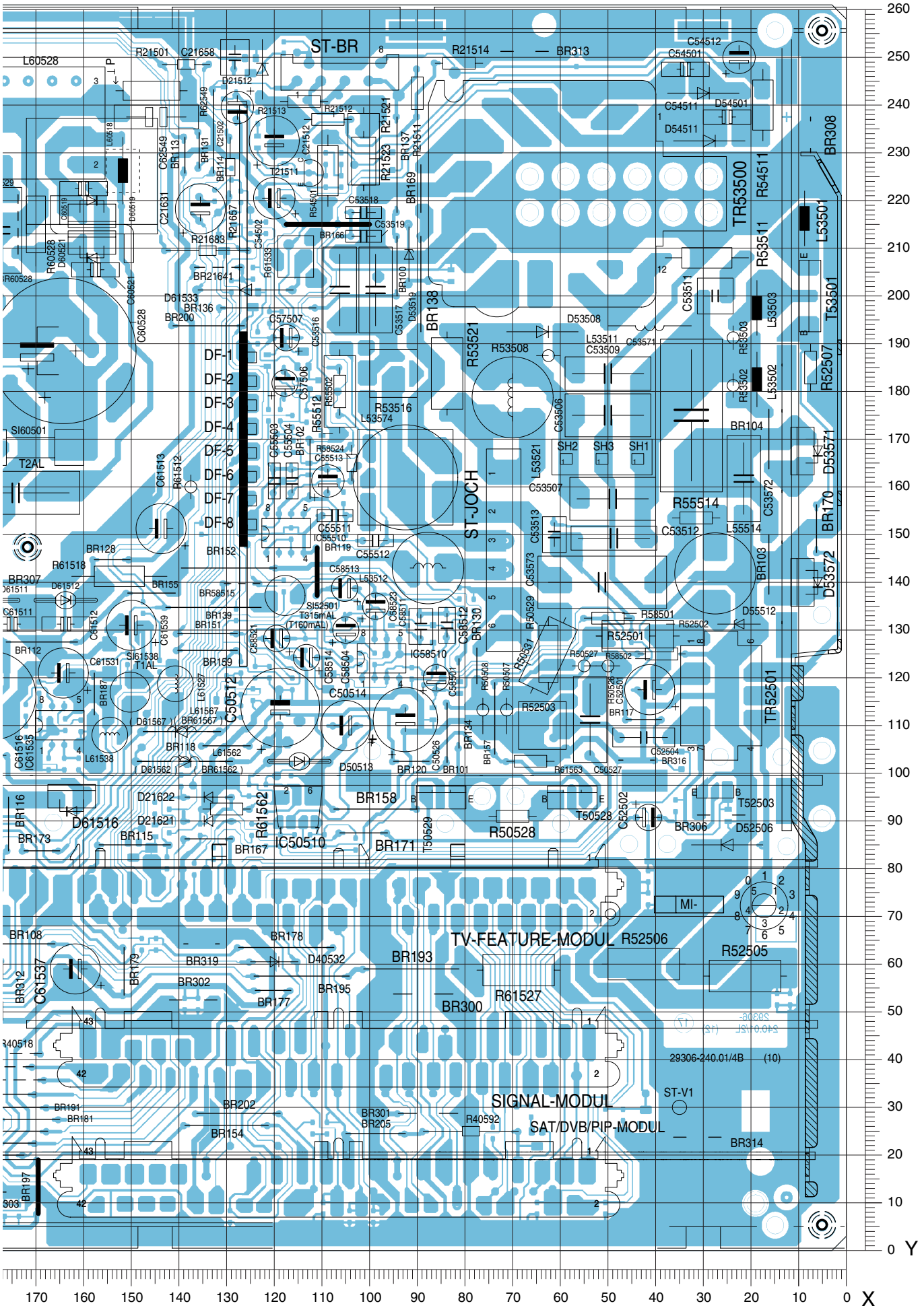
## Koordinaten für die Bauteile der Bestückungsseite (Oberseite)
## Coordinates of the Components on the Components Side (Top Side)

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| BR100 | 94 | 206 |
| BR101 | 84 | 108 |
| BR102 | 113 | 164 |
| BR103 | 16 | 144 |
| BR104 | 16 | 170 |
| BR105 | 275 | 70 |
| BR106 | 242 | 155 |
| BR108 | 172 | 64 |
| BR109 | 337 | 94 |
| BR110 | 174 | 25 |
| BR111 | 190 | 84 |
| BR112 | 169 | 127 |
| BR113 | 139 | 229 |
| BR114 | 133 | 235 |
| BR115 | 149 | 85 |
| BR116 | 176 | 89 |
| BR117 | 43 | 111 |
| BR118 | 130 | 106 |
| BR119 | 111 | 142 |
| BR120 | 91 | 102 |
| BR121 | 278 | 66 |
| BR122 | 304 | 106 |
| BR123 | 303 | 91 |
| BR124 | 297 | 57 |
| BR125 | 297 | 111 |
| BR126 | 322 | 194 |
| BR127 | 216 | 54 |
| BR128 | 154 | 145 |
| BR129 | 273 | 117 |
| BR130 | 78 | 123 |
| BR131 | 136 | 231 |
| BR132 | 305 | 136 |
| BR133 | 280 | 92 |
| BR134 | 81 | 115 |
| BR135 | 216 | 226 |
| BR136 | 121 | 198 |
| BR137 | 94 | 228 |
| BR138 | 89 | 203 |
| BR139 | 133 | 135 |
| BR140 | 192 | 202 |
| BR141 | 306 | 53 |
| BR142 | 305 | 75 |
| BR143 | 267 | 79 |
| BR145 | 290 | 89 |
| BR146 | 233 | 79 |
| BR148 | 215 | 95 |
| BR149 | 263 | 83 |
| BR150 | 246 | 154 |
| BR151 | 134 | 129 |
| BR152 | 130 | 143 |
| BR153 | 267 | 102 |
| BR154 | 130 | 26 |
| BR155 | 146 | 138 |
| BR157 | 74 | 111 |
| BR158 | 99 | 93 |
| BR159 | 134 | 126 |
| BR160 | 198 | 219 |
| BR161 | 292 | 166 |
| BR162 | 227 | 79 |
| BR163 | 290 | 33 |
| BR165 | 278 | 176 |
| BR166 | 109 | 215 |
| BR167 | 134 | 86 |
| BR168 | 181 | 188 |
| BR169 | 89 | 222 |
| BR170 | 6 | 151 |
| BR171 | 101 | 88 |
| BR173 | 169 | 84 |
| BR174 | 276 | 95 |
| BR176 | 237 | 57 |
| BR177 | 120 | 54 |
| BR178 | 117 | 63 |
| BR179 | 151 | 58 |
| BR180 | 193 | 52 |
| BR181 | 171 | 28 |
| BR183 | 183 | 53 |
| BR185 | 177 | 33 |
| BR187 | 158 | 117 |
| BR189 | 270 | 82 |
| BR190 | 284 | 72 |
| BR191 | 175 | 30 |
| BR192 | 180 | 23 |
| BR193 | 91 | 59 |
| BR194 | 183 | 20 |
| BR195 | 114 | 58 |
| BR196 | 186 | 54 |
| BR197 | 169 | 13 |
| BR199 | 324 | 197 |
| BR200 | 134 | 194 |
| BR202 | 127 | 29 |
| BR204 | 190 | 55 |
| BR205 | 99 | 25 |
| BR206 | 188 | 17 |
| BR300 | 89 | 54 |
| BR301 | 88 | 29 |
| BR302 | 137 | 53 |
| BR303 | 183 | 12 |
| BR304 | 244 | 29 |
| BR305 | 317 | 71 |
| BR306 | 26 | 91 |
| BR307 | 183 | 141 |
| BR308 | 8 | 234 |
| BR309 | 190 | 190 |
| BR310 | 342 | 91 |
| BR311 | 313 | 10 |
| BR312 | 177 | 54 |
| BR313 | 68 | 251 |
| BR314 | 31 | 24 |
| BR315 | 323 | 130 |
| BR316 | 44 | 103 |
| BR317 | 245 | 80 |
| BR318 | 291 | 162 |
| BR319 | 135 | 64 |
| BR320 | 207 | 242 |
| BR10003 | 325 | 85 |
| BR10004 | 325 | 93 |
| BR10005 | 325 | 88 |
| BR10006 | 325 | 58 |
| BR10007 | 327 | 72 |
| BR10009 | 325 | 83 |
| BR10010 | 325 | 61 |
| BR10011 | 325 | 90 |
| BR10013 | 325 | 53 |
| BR10014 | 325 | 56 |
| BR10015 | 325 | 30 |
| BR10016 | 325 | 25 |
| BR10019 | 325 | 28 |
| BR10020 | 325 | 80 |
| BR21641 | 132 | 206 |
| BR22503 | 232 | 201 |
| BR40501 | 269 | 20 |
| BR40502 | 269 | 55 |
| BR40503 | 237 | 25 |
| BR40504 | 269 | 16 |
| BR40507 | 255 | 51 |
| BR40511 | 254 | 35 |
| BR40512 | 230 | 21 |
| BR40513 | 228 | 30 |
| BR40514 | 254 | 48 |
| BR40516 | 175 | 36 |
| BR40517 | 179 | 38 |
| BR40518 | 176 | 41 |
| BR58515 | 127 | 140 |
| BR60508 | 262 | 173 |
| BR60514 | 262 | 151 |
| BR60515 | 254 | 152 |
| BR60528 | 174 | 215 |
| BR61514 | 206 | 122 |
| BR61515 | 209 | 122 |
| BR61522 | 259 | 114 |
| BR61557 | 294 | 106 |
| BR61562 | 139 | 102 |
| BR61563 | 214 | 88 |
| BR61567 | 139 | 109 |
| BR61568 | 212 | 92 |
| BR62501 | 229 | 229 |
| BR62502 | 229 | 222 |
| BR62503 | 278 | 230 |
| BU10 | 346 | 36 |
| BU11 | 345 | 66 |
| C21502 | 128 | 240 |
| C21512 | 120 | 232 |
| C21631 | 135 | 218 |
| C21658 | 128 | 250 |
| C21662 | 329 | 204 |
| C22501 | 245 | 194 |
| C40502 | 292 | 18 |
| C40532 | 199 | 28 |
| C40534 | 223 | 26 |
| C40537 | 261 | 36 |
| C44506 | 329 | 41 |
| C44508 | 335 | 41 |
| C50512 | 119 | 113 |
| C50514 | 105 | 110 |
| C50526 | 93 | 111 |
| C50527 | 54 | 111 |
| C52501 | 41 | 117 |
| C52502 | 42 | 91 |
| C52504 | 43 | 108 |
| C53506 | 50 | 175 |
| C53507 | 49 | 158 |
| C53509 | 50 | 184 |
| C53511 | 28 | 200 |
| C53512 | 49 | 149 |
| C53513 | 61 | 150 |
| C53516 | 106 | 201 |
| C53517 | 99 | 201 |
| C53518 | 101 | 217 |
| C53519 | 101 | 213 |
| C53571 | 33 | 175 |
| C53572 | 22 | 162 |
| C53573 | 51 | 140 |
| C54501 | 34 | 247 |
| C54502 | 120 | 221 |
| C54511 | 25 | 238 |
| C54512 | 23 | 250 |
| C55503 | 120 | 161 |
| C55504 | 116 | 161 |
| C55511 | 107 | 154 |
| C55512 | 99 | 149 |
| C55513 | 109 | 161 |
| C57506 | 118 | 182 |
| C57507 | 117 | 191 |
| C58501 | 86 | 120 |
| C58504 | 105 | 130 |
| C58511 | 89 | 131 |
| C58512 | 84 | 131 |
| C58513 | 105 | 138 |
| C58514 | 113 | 124 |
| C58521 | 119 | 128 |
| C58523 | 99 | 135 |
| C60501 | 197 | 170 |
| C60504 | 285 | 148 |
| C60506 | 226 | 176 |
| C60507 | 236 | 170 |
| C60509 | 192 | 166 |
| C60511 | 284 | 158 |
| C60512 | 270 | 173 |
| C60513 | 259 | 151 |
| C60518 | 174 | 159 |
| C60519 | 160 | 222 |
| C60521 | 158 | 206 |
| C60523 | 199 | 235 |
| C60524 | 184 | 209 |
| C60526 | 191 | 230 |
| C60527 | 184 | 219 |
| C60528 | 164 | 189 |
| C60529 | 177 | 214 |
| C60801 | 288 | 173 |
| C60802 | 288 | 177 |
| C60811 | 298 | 128 |
| C60812 | 310 | 128 |
| C60813 | 311 | 111 |
| C61504 | 283 | 115 |
| C61511 | 175 | 131 |
| C61512 | 164 | 131 |
| C61513 | 143 | 151 |
| C61514 | 192 | 121 |
| C61516 | 179 | 115 |
| C61517 | 184 | 127 |
| C61521 | 250 | 107 |
| C61522 | 259 | 118 |
| C61524 | 199 | 105 |
| C61525 | 202 | 115 |
| C61527 | 255 | 129 |
| C61531 | 164 | 121 |
| C61537 | 161 | 59 |
| C61539 | 150 | 131 |
| C61541 | 240 | 69 |
| C61549 | 210 | 57 |
| C61551 | 271 | 110 |
| C61559 | 267 | 63 |
| C61561 | 240 | 106 |
| C61562 | 233 | 116 |
| C61563 | 212 | 110 |
| C61566 | 222 | 115 |
| C62501 | 265 | 224 |
| C62502 | 207 | 223 |
| C62521 | 191 | 247 |
| C62548 | 191 | 144 |
| C62549 | 145 | 238 |
| C84501 | 347 | 173 |
| D21512 | 123 | 247 |
| D21621 | 134 | 90 |
| D21622 | 134 | 95 |
| D40532 | 120 | 61 |
| D50513 | 115 | 102 |
| D52506 | 25 | 85 |
| D53508 | 64 | 192 |
| D53519 | 92 | 209 |
| D53571 | 8 | 167 |
| D53572 | 8 | 140 |
| D54501 | 30 | 242 |
| D54511 | 29 | 233 |
| D55512 | 23 | 131 |
| D60504 | 240 | 188 |
| D60506 | 240 | 180 |
| D60509 | 240 | 176 |
| D60512 | 267 | 159 |
| D60519 | 158 | 218 |
| D60521 | 158 | 210 |
| D60523 | 191 | 215 |
| D60524 | 196 | 219 |
| D61503 | 274 | 121 |
| D61511 | 180 | 136 |
| D61512 | 164 | 136 |
| D61516 | 163 | 94 |
| D61521 | 238 | 94 |
| D61524 | 200 | 94 |
| D61533 | 126 | 201 |
| D61561 | 245 | 114 |
| D61562 | 139 | 102 |
| D61563 | 214 | 88 |
| D61566 | 217 | 119 |
| D61567 | 139 | 109 |
| D61568 | 212 | 92 |
| D85501 | 344 | 194 |
| DF-01 | 125 | 187 |
| DF-02 | 125 | 182 |
| DF-03 | 125 | 177 |
| DF-04 | 125 | 172 |
| DF-05 | 125 | 167 |
| DF-06 | 125 | 162 |
| DF-07 | 125 | 157 |
| DF-08 | 125 | 152 |
| IC40510 | 242 | 39 |
| IC50510 | 115 | 93 |
| IC55510 | 117 | 150 |
| IC58510 | 98 | 124 |
| IC60510 | 272 | 150 |
| IC60801 | 299 | 176 |
| IC60817 | 326 | 172 |
| IC61510 | 286 | 127 |
| IC61535 | 165 | 110 |
| IC61545 | 252 | 66 |
| IC61555 | 286 | 107 |
| IC84501 | 355 | 174 |
| L+ | 341 | 140 |
| L- | 341 | 154 |
| L53501 | 9 | 216 |
| L53502 | 19 | 183 |
| L53503 | 19 | 198 |
| L53511 | 41 | 194 |
| L53512 | 88 | 143 |
| L53521 | 70 | 179 |
| L53574 | 93 | 162 |
| L55514 | 28 | 142 |
| L60506 | 208 | 170 |
| L60507 | 207 | 163 |
| L60518 | 152 | 226 |
| L60528 | 169 | 236 |
| L60804 | 181 | 200 |
| L60812 | 304 | 119 |
| L61511 | 189 | 133 |
| L61514 | 182 | 104 |
| L61521 | 249 | 119 |
| L61524 | 204 | 126 |
| L61527 | 141 | 119 |
| L61538 | 155 | 108 |
| L61548 | 227 | 57 |
| L61549 | 198 | 58 |
| L61558 | 281 | 80 |
| L61561 | 241 | 119 |
| L61562 | 139 | 102 |
| L61566 | 231 | 126 |
| L61567 | 139 | 109 |
| L62501 | 232 | 226 |
| MECH01 | 158 | 222 |
| NETZ01 | 294 | 198 |
| NETZ02 | 294 | 205 |
| OK22505 | 310 | 199 |
| OK60531 | 270 | 129 |
| OK60546 | 310 | 186 |
| OK60805 | 310 | 176 |
| P+ | 341 | 107 |
| P- | 341 | 121 |
| R21501 | 139 | 249 |
| R21511 | 90 | 242 |
| R21512 | 109 | 237 |
| R21513 | 114 | 241 |
| R21514 | 81 | 249 |
| R21521 | 101 | 231 |
| R21523 | 101 | 228 |
| R21657 | 129 | 227 |
| R21683 | 134 | 210 |
| R22501 | 265 | 192 |
| R22504 | 228 | 206 |
| R22506 | 231 | 210 |
| R40502 | 260 | 51 |
| R40503 | 294 | 33 |
| R40504 | 280 | 18 |
| R40592 | 79 | 25 |
| R50507 | 71 | 113 |
| R50508 | 76 | 113 |
| R50526 | 50 | 123 |
| R50527 | 55 | 123 |
| R50528 | 70 | 91 |
| R50529 | 63 | 125 |
| R50531 | 63 | 125 |
| R52501 | 46 | 129 |
| R52502 | 44 | 129 |
| R52503 | 64 | 110 |
| R52505 | 21 | 58 |
| R52506 | 43 | 60 |
| R52507 | 8 | 185 |
| R53502 | 24 | 181 |
| R53503 | 24 | 191 |
| R53508 | 63 | 188 |
| R53511 | 29 | 208 |
| R53516 | 95 | 184 |
| R53521 | 84 | 184 |
| R54501 | 109 | 226 |
| R54511 | 18 | 240 |
| R55502 | 106 | 180 |
| R55512 | 106 | 180 |
| R55514 | 32 | 153 |
| R58501 | 50 | 133 |
| R58502 | 39 | 125 |
| R58524 | 104 | 165 |
| R60502 | 267 | 164 |
| R60503 | 213 | 187 |
| R60504 | 271 | 141 |
| R60506 | 226 | 187 |
| R60508 | 263 | 175 |
| R60512 | 254 | 152 |
| R60513 | 269 | 136 |
| R60528 | 170 | 215 |
| R60801 | 294 | 169 |
| R60802 | 306 | 164 |
| R60803 | 200 | 193 |
| R60804 | 191 | 196 |
| R60806 | 275 | 182 |
| R61508 | 331 | 185 |
| R61512 | 138 | 160 |
| R61518 | 152 | 141 |
| R61527 | 69 | 59 |
| R61533 | 116 | 208 |
| R61558 | 294 | 106 |
| R61562 | 130 | 93 |
| R61563 | 66 | 102 |
| R61586 | 319 | 191 |
| R62501 | 245 | 226 |
| R62502 | 210 | 197 |
| R62503 | 253 | 230 |
| R62549 | 146 | 243 |
| R85513 | 300 | 91 |
| R85514 | 300 | 80 |
| S01 | 107 | 15 |
| S02 | 107 | 43 |
| S03 | 132 | 77 |
| S62501 | 309 | 219 |
| SH01 | 44 | 166 |
| SH02 | 59 | 166 |
| SH03 | 51 | 166 |
| SI52501 | 118 | 137 |
| SI60501 | 171 | 168 |
| SI61521 | 257 | 105 |
| SI61524 | 184 | 91 |
| SI61538 | 150 | 117 |
| SI61561 | 233 | 106 |
| SI61566 | 222 | 108 |
| SI62501 | 293 | 237 |
| ST+M | 255 | 88 |
| ST-BED01 | 311 | 39 |
| ST-BR | 106 | 247 |
| ST-CI01 | 311 | 59 |
| ST-CI02 | 328 | 59 |
| ST-DO01 | 278 | 35 |
| ST-DO02 | 284 | 35 |
| ST-DOT01 | 292 | 56 |
| ST-E | 247 | 202 |
| ST-H01 | 311 | 23 |
| ST-H02 | 328 | 28 |
| ST-IR_KB02 | 329 | 85 |
| ST-IR_KB01 | 311 | 83 |
| ST-JOCH | 72 | 147 |
| ST-LSL | 253 | 24 |
| ST-LSR | 237 | 17 |
| ST-TT01 | 272 | 28 |
| ST-V01 | 35 | 30 |
| ST01 | 287 | 199 |
| T21511 | 112 | 226 |
| T50528 | 58 | 95 |
| T50529 | 85 | 95 |
| T52503 | 28 | 96 |
| T53501 | 8 | 200 |
| T60506 | 219 | 174 |
| TC22503 | 228 | 202 |
| TR52501 | 26 | 116 |
| TR53500 | 56 | 220 |
| TR60500 | 224 | 144 |
| TR60800 | 303 | 152 |
| TR60801 | 303 | 149 |
| ZNT01 | 281 | 228 |
| ZNT02 | 273 | 228 |

# Chassisplatte / Chassis Board

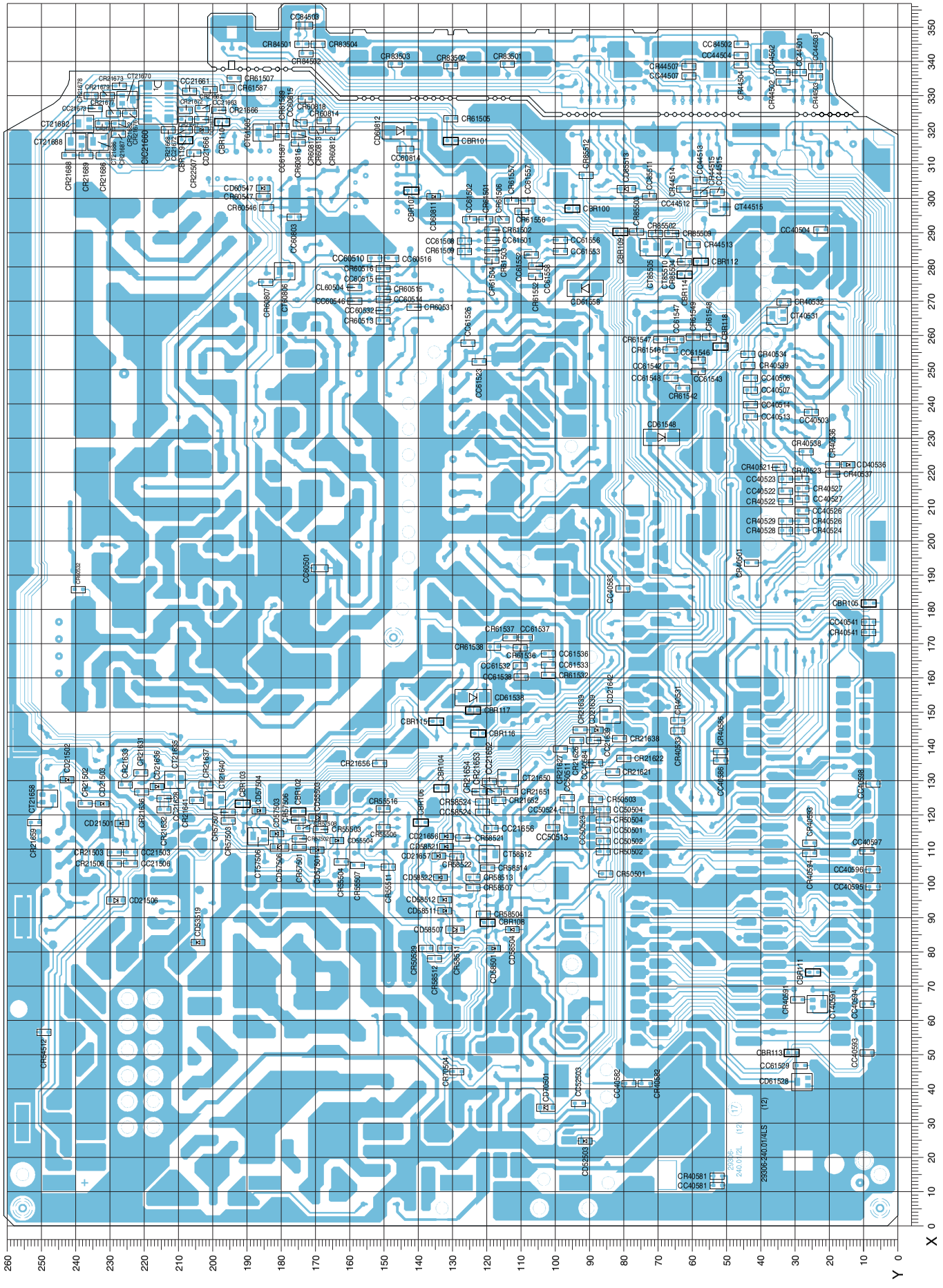
**Bestückungsseite, Ansicht von oben / Component Side, Top View**




ST-BR
ST-JOCH
TV-FEATURE-MODUL
SIGNAL-MODUL
SAT/DVB/PIP-MODUL
TR53500
TR52501
DF-1
DF-2
DF-3
DF-4
DF-5
DF-6
DF-7
DF-8
MI-
ST-V1
29306-240.01/4B (10)
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0 Y
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0 X

# Chassisplatte / Chassis Board

## Lötseite, Ansicht von unten / Solder Side, Bottom View



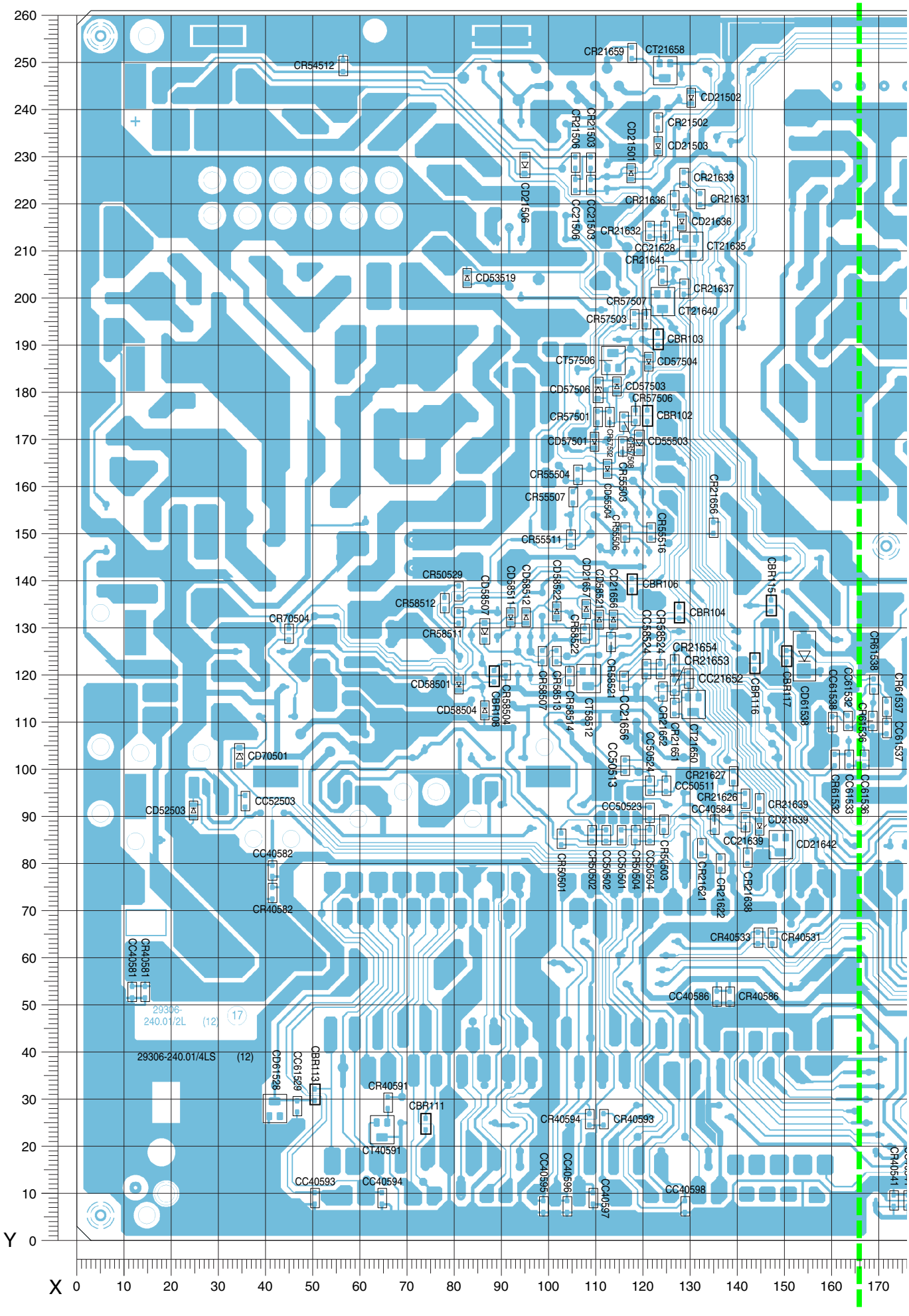
# Chassisplatte / Chassis Board

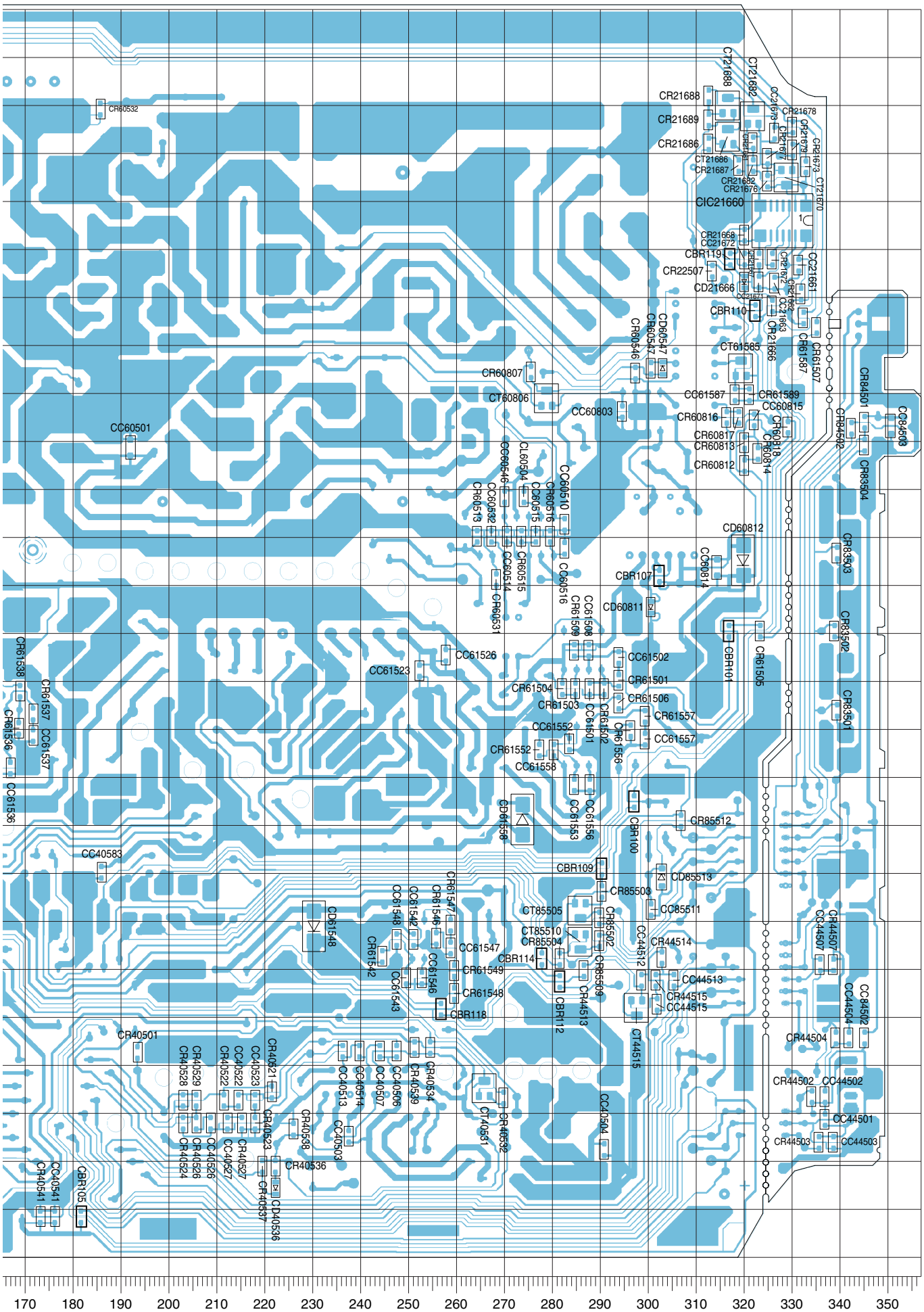
## Koordinaten für die Bauteile der Lötseite (Unterseite)
## Coordinates of the components on the Solder Side (Bottom Side)

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CBR100 | 297 | 95 |
| CBR101 | 317 | 131 |
| CBR102 | 121 | 175 |
| CBR103 | 123 | 191 |
| CBR104 | 128 | 133 |
| CBR105 | 182 | 9 |
| CBR106 | 118 | 139 |
| CBR107 | 302 | 142 |
| CBR108 | 89 | 120 |
| CBR109 | 290 | 81 |
| CBR110 | 322 | 197 |
| CBR111 | 74 | 25 |
| CBR112 | 281 | 58 |
| CBR113 | 51 | 31 |
| CBR114 | 278 | 62 |
| CBR115 | 147 | 135 |
| CBR116 | 144 | 123 |
| CBR117 | 150 | 124 |
| CBR118 | 257 | 52 |
| CBR119 | 317 | 208 |
| CC21503 | 109 | 224 |
| CC21506 | 106 | 224 |
| CC21628 | 125 | 214 |
| CC21639 | 142 | 89 |
| CC21652 | 130 | 119 |
| CC21656 | 116 | 119 |
| CC21661 | 331 | 207 |
| CC21663 | 326 | 203 |
| CC21671 | 323 | 203 |
| CC21672 | 320 | 208 |
| CC21673 | 326 | 234 |
| CC40503 | 238 | 25 |
| CC40504 | 291 | 23 |
| CC40506 | 247 | 43 |
| CC40507 | 244 | 43 |
| CC40513 | 236 | 43 |
| CC40514 | 240 | 43 |
| CC40522 | 215 | 33 |
| CC40523 | 218 | 33 |
| CC40526 | 209 | 28 |
| CC40527 | 212 | 28 |
| CC40541 | 176 | 9 |
| CC40581 | 12 | 53 |
| CC40582 | 42 | 78 |
| CC40583 | 186 | 80 |
| CC40584 | 135 | 88 |
| CC40586 | 136 | 52 |
| CC40593 | 51 | 9 |
| CC40594 | 65 | 9 |
| CC40595 | 99 | 7 |
| CC40596 | 104 | 7 |
| CC40597 | 109 | 9 |
| CC40598 | 129 | 7 |
| CC44501 | 337 | 29 |
| CC44502 | 337 | 33 |
| CC44503 | 338 | 24 |
| CC44504 | 342 | 46 |
| CC44507 | 336 | 61 |
| CC44512 | 299 | 58 |
| CC44513 | 305 | 58 |
| CC44515 | 302 | 53 |
| CC50501 | 116 | 86 |
| CC50502 | 112 | 86 |
| CC50504 | 122 | 86 |
| CC50511 | 125 | 97 |
| CC50513 | 116 | 101 |
| CC50523 | 122 | 91 |
| CC50524 | 122 | 97 |
| CC52503 | 36 | 93 |
| CC58524 | 121 | 121 |
| CC60501 | 192 | 169 |
| CC60510 | 283 | 153 |
| CC60514 | 271 | 150 |
| CC60515 | 276 | 150 |
| CC60516 | 283 | 148 |
| CC60532 | 267 | 150 |
| CC60546 | 270 | 158 |
| CC60803 | 294 | 176 |
| CC60814 | 314 | 144 |
| CC60815 | 322 | 175 |
| CC61501 | 288 | 118 |
| CC61502 | 294 | 125 |
| CC61508 | 288 | 126 |
| CC61523 | 252 | 122 |
| CC61526 | 258 | 125 |
| CC61529 | 47 | 28 |
| CC61532 | 164 | 110 |
| CC61533 | 164 | 102 |
| CC61536 | 167 | 102 |
| CC61537 | 172 | 109 |
| CC61538 | 160 | 110 |
| CC61542 | 251 | 66 |
| CC61543 | 249 | 58 |
| CC61546 | 253 | 58 |
| CC61547 | 259 | 65 |
| CC61548 | 247 | 66 |
| CC61552 | 283 | 107 |
| CC61553 | 285 | 98 |
| CC61556 | 288 | 98 |
| CC61557 | 299 | 108 |
| CC61558 | 280 | 106 |
| CC61587 | 318 | 180 |
| CC84502 | 345 | 46 |
| CC84503 | 351 | 173 |
| CC85511 | 301 | 73 |
| CD21501 | 117 | 226 |
| CD21502 | 130 | 242 |
| CD21503 | 123 | 232 |
| CD21506 | 95 | 228 |
| CD21636 | 128 | 216 |
| CD21639 | 145 | 88 |
| CD21642 | 149 | 84 |
| CD21656 | 114 | 132 |
| CD21657 | 108 | 134 |
| CD21666 | 320 | 203 |
| CD40536 | 222 | 15 |
| CD52503 | 25 | 91 |
| CD53519 | 83 | 204 |
| CD55503 | 119 | 169 |
| CD55504 | 113 | 164 |
| CD57501 | 110 | 169 |
| CD57503 | 115 | 181 |
| CD57504 | 121 | 186 |
| CD57506 | 110 | 181 |
| CD58501 | 81 | 118 |
| CD58504 | 86 | 113 |
| CD58507 | 86 | 129 |
| CD58511 | 92 | 132 |
| CD58512 | 95 | 132 |
| CD58521 | 111 | 132 |
| CD58522 | 102 | 133 |
| CD60547 | 303 | 185 |
| CD60811 | 301 | 135 |
| CD60812 | 320 | 145 |
| CD61528 | 42 | 28 |
| CD61538 | 154 | 124 |
| CD61548 | 230 | 69 |
| CD61558 | 274 | 91 |
| CD70501 | 35 | 103 |
| CD85513 | 303 | 79 |
| CIC21660 | 328 | 216 |
| CL60504 | 274 | 158 |
| CR21502 | 123 | 237 |
| CR21503 | 109 | 229 |
| CR21506 | 106 | 229 |
| CR21621 | 133 | 83 |
| CR21622 | 136 | 80 |
| CR21626 | 142 | 94 |
| CR21627 | 139 | 98 |
| CR21631 | 132 | 221 |
| CR21632 | 122 | 214 |
| CR21633 | 129 | 226 |
| CR21636 | 127 | 221 |
| CR21637 | 129 | 202 |
| CR21638 | 142 | 81 |
| CR21639 | 145 | 93 |
| CR21641 | 124 | 205 |
| CR21651 | 127 | 113 |
| CR21652 | 124 | 117 |
| CR21653 | 127 | 118 |
| CR21654 | 127 | 122 |
| CR21656 | 135 | 151 |
| CR21659 | 118 | 252 |
| CR21662 | 332 | 201 |
| CR21666 | 326 | 198 |
| CR21667 | 323 | 208 |
| CR21668 | 320 | 213 |
| CR21672 | 326 | 208 |
| CR21673 | 333 | 227 |
| CR21676 | 325 | 224 |
| CR21677 | 325 | 229 |
| CR21678 | 330 | 235 |
| CR21679 | 330 | 231 |
| CR21681 | 322 | 232 |
| CR21682 | 322 | 228 |
| CR21686 | 313 | 232 |
| CR21687 | 319 | 228 |
| CR21688 | 313 | 242 |
| CR21689 | 313 | 237 |
| CR22507 | 313 | 206 |
| CR40501 | 193 | 43 |
| CR40521 | 222 | 35 |
| CR40522 | 212 | 33 |
| CR40523 | 218 | 28 |
| CR40524 | 203 | 28 |
| CR40526 | 206 | 28 |
| CR40527 | 215 | 28 |
| CR40528 | 203 | 33 |
| CR40529 | 206 | 33 |
| CR40531 | 148 | 64 |
| CR40532 | 270 | 33 |
| CR40533 | 144 | 64 |
| CR40534 | 254 | 44 |
| CR40536 | 222 | 19 |
| CR40537 | 219 | 19 |
| CR40538 | 226 | 27 |
| CR40539 | 251 | 44 |
| CR40541 | 173 | 9 |
| CR40581 | 15 | 53 |
| CR40582 | 42 | 74 |
| CR40586 | 139 | 52 |
| CR40591 | 66 | 29 |
| CR40593 | 112 | 26 |
| CR40594 | 109 | 26 |
| CR44502 | 334 | 33 |
| CR44503 | 335 | 24 |
| CR44504 | 339 | 46 |
| CR44507 | 338 | 61 |
| CR44513 | 287 | 60 |
| CR44514 | 303 | 63 |
| CR44515 | 301 | 58 |
| CR50501 | 103 | 85 |
| CR50502 | 109 | 86 |
| CR50503 | 125 | 88 |
| CR50504 | 118 | 86 |
| CR50529 | 81 | 138 |
| CR54512 | 57 | 249 |
| CR55503 | 116 | 168 |
| CR55504 | 106 | 163 |
| CR55506 | 116 | 150 |
| CR55507 | 105 | 158 |
| CR55511 | 105 | 149 |
| CR55516 | 122 | 150 |
| CR57501 | 110 | 175 |
| CR57502 | 113 | 175 |
| CR57503 | 118 | 195 |
| CR57506 | 118 | 175 |
| CR57507 | 121 | 195 |
| CR57508 | 116 | 174 |
| CR58504 | 91 | 121 |
| CR58507 | 99 | 124 |
| CR58511 | 81 | 132 |
| CR58512 | 78 | 135 |
| CR58513 | 102 | 124 |
| CR58514 | 105 | 120 |
| CR58521 | 113 | 127 |
| CR58522 | 108 | 129 |
| CR58524 | 124 | 121 |
| CR60513 | 264 | 150 |
| CR60515 | 274 | 150 |
| CR60516 | 279 | 150 |
| CR60531 | 268 | 141 |
| CR60532 | 186 | 239 |
| CR60546 | 297 | 184 |
| CR60547 | 301 | 185 |
| CR60807 | 276 | 184 |
| CR60812 | 320 | 165 |
| CR60813 | 320 | 170 |
| CR60814 | 323 | 167 |
| CR60816 | 316 | 175 |
| CR60817 | 319 | 175 |
| CR60818 | 329 | 173 |
| CR61501 | 294 | 120 |
| CR61502 | 291 | 118 |
| CR61503 | 285 | 118 |
| CR61504 | 282 | 118 |
| CR61505 | 323 | 131 |
| CR61506 | 294 | 116 |
| CR61507 | 335 | 194 |
| CR61509 | 285 | 126 |
| CR61532 | 161 | 102 |
| CR61536 | 169 | 110 |
| CR61537 | 172 | 113 |
| CR61538 | 169 | 118 |
| CR61542 | 245 | 63 |
| CR61546 | 256 | 67 |
| CR61547 | 259 | 69 |
| CR61548 | 260 | 55 |
| CR61549 | 260 | 60 |
| CR61552 | 277 | 106 |
| CR61556 | 296 | 110 |
| CR61557 | 299 | 113 |
| CR61587 | 332 | 196 |
| CR61589 | 321 | 180 |
| CR70504 | 45 | 129 |
| CR83501 | 339 | 114 |
| CR83502 | 339 | 131 |
| CR83503 | 339 | 147 |
| CR83504 | 345 | 169 |
| CR84501 | 345 | 174 |
| CR84502 | 342 | 173 |
| CR85502 | 290 | 71 |
| CR85503 | 290 | 76 |
| CR85504 | 281 | 62 |
| CR85509 | 290 | 66 |
| CR85512 | 307 | 91 |
| CT21635 | 130 | 211 |
| CT21640 | 124 | 199 |
| CT21650 | 131 | 114 |
| CT21658 | 125 | 248 |
| CT21670 | 329 | 225 |
| CT21682 | 322 | 238 |
| CT21686 | 317 | 233 |
| CT21688 | 317 | 240 |
| CT40531 | 266 | 35 |
| CT40591 | 65 | 23 |
| CT44515 | 297 | 52 |
| CT57506 | 114 | 187 |
| CT58512 | 108 | 119 |
| CT60806 | 279 | 179 |
| CT61585 | 319 | 185 |
| CT85505 | 286 | 72 |
| CT85510 | 286 | 66 |

# Chassisplatte / Chassis Board

**Lötseite, Ansicht von unten / Solder Side, Bottom View**




CR60532
CT21688
CT21682
CR21688
CR21689
CR21686
CC21678
CR21678
CR21679
CR21677
CR21673
CT21670
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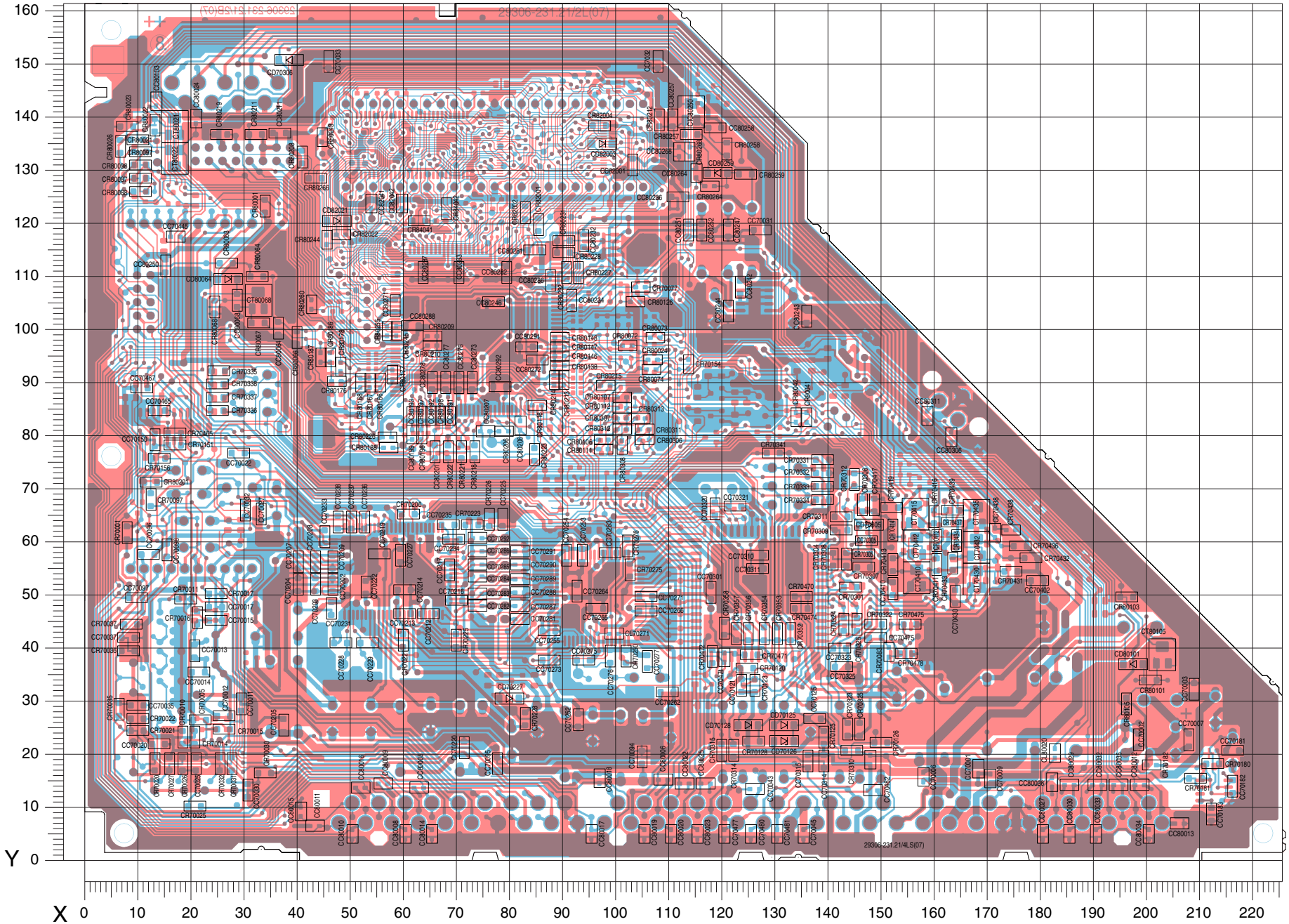
CR21687
CR21682
CR21676
CIC21660
CR21668
CC21672
CBR119
CR22507
CD21666
CC21661
CR21672
CR21682
CC21671
CC21663
CR21666
CBR110
CR60546
CD60547
CR60547
CT61565
CR61587
CR61507
CR84501
CC84503
CR84502
CR60807
CT60806
CC60803
CC61587
CR61589
CC60815
CR60816
CR60817
CR60813
CR60818
CR60814
CR60812
CC60501
CC60546
CL60504
CC60532
CR60513
CR60516
CR60515
CC60514
CR60531
CC60510
CC60516
CD60812
CC60814
CR83503
CR83504
CBR107
CD60811
CR61508
CR61509
CR61502
CR61501
CR61506
CR61557
CC61557
CR61556
CC61556
CC61553
CR61552
CC61558
CD61558
CR61504
CR61503
CC61501
CC61552
CC61526
CC61523
CR61538
CR61537
CC61537
CR61536
CC61536
CR61505
CBR101
CR83502
CR83501
CR85512
CBR100
CD85513
CC85511
CR85503
CR85502
CR85509
CC44512
CR44514
CC44513
CR44515
CC44515
CT44515
CR44513
CBR112
CR44507
CC44507
CC44504
CC84502
CR44504
CR44502
CC44502
CC44501
CR44503
CC44503
CBR109
CT85505
CT85510
CR85504
CBR114
CC61547
CR61549
CR61548
CBR118
CR61547
CR61546
CC61542
CC61548
CR61542
CC61543
CC61546
CD61548
CC40583
CR40501
CR40521
CC40523
CR40523
CD40536
CR40537
CC40522
CR40522
CR40529
CR40528
CC40526
CR40526
CR40524
CC40527
CR40527
CR40558
CR40536
CC40503
CC40513
CC40514
CC40507
CC40506
CR40539
CR40534
CT40851
CR40532
CC40504
CC40541
CR40541
CBR105
170
180
190
200
210
220
230
240
250
260
270
280
290
300
310
320
330
340
350

# Feature-Modul / Feature Module 29504203280 0

## Lötseite, Ansicht von unten / Solder Side, Bottom View



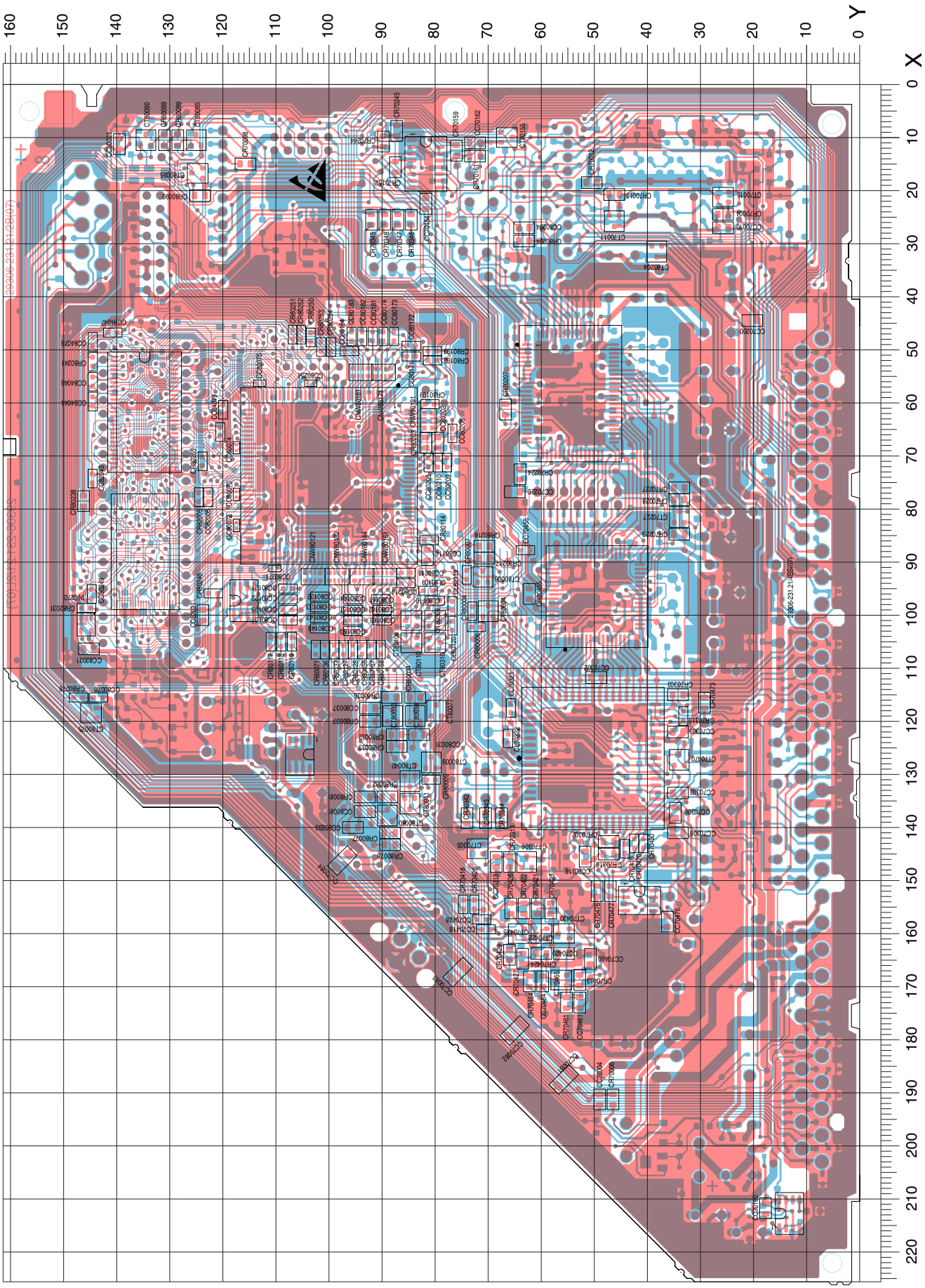
# Feature-Modul / Feature Module 295042032800

**Koordinaten für die Bauteile der Lötseite (Unterseite)**
**Coordinates of the components on the Solder Side (Bottom Side)**

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CC7032 | 108 | 150 |
| CC70001 | 168 | 17 |
| CC70002 | 199 | 23 |
| CC70003 | 209 | 32 |
| CC70006 | 158 | 16 |
| CC70007 | 208 | 23 |
| CC70009 | 171 | 15 |
| CC70011 | 30 | 30 |
| CC70012 | 26 | 27 |
| CC70013 | 21 | 40 |
| CC70014 | 22 | 35 |
| CC70015 | 25 | 45 |
| CC70017 | 25 | 48 |
| CC70020 | 14 | 22 |
| CC70022 | 29 | 77 |
| CC70025 | 21 | 18 |
| CC70027 | 33 | 65 |
| CC70030 | 31 | 13 |
| CC70031 | 127 | 119 |
| CC70032 | 30 | 66 |
| CC70033 | 46 | 150 |
| CC70035 | 10 | 29 |
| CC70037 | 8 | 42 |
| CC70043 | 126 | 14 |
| CC70045 | 135 | 5 |
| CC70094 | 105 | 20 |
| CC70095 | 78 | 18 |
| CC70096 | 12 | 58 |
| CC70097 | 10 | 49 |
| CC70098 | 15 | 58 |
| CC70121 | 124 | 33 |
| CC70125 | 138 | 27 |
| CC70150 | 13 | 79 |
| CC70181 | 216 | 21 |
| CC70182 | 216 | 14 |
| CC70183 | 212 | 9 |
| CC70202 | 47 | 52 |
| CC70203 | 43 | 52 |
| CC70204 | 40 | 52 |
| CC70205 | 38 | 25 |
| CC70207 | 40 | 56 |
| CC70208 | 43 | 56 |
| CC70209 | 47 | 56 |
| CC70212 | 65 | 47 |
| CC70213 | 60 | 47 |
| CC70214 | 60 | 51 |
| CC70216 | 70 | 49 |
| CC70217 | 69 | 55 |
| CC70219 | 56 | 58 |
| CC70220 | 72 | 21 |
| CC70222 | 53 | 52 |
| CC70225 | 79 | 64 |
| CC70227 | 59 | 58 |
| CC70228 | 48 | 41 |
| CC70229 | 53 | 41 |
| CC70231 | 47 | 48 |
| CC70233 | 45 | 61 |
| CC70234 | 69 | 61 |
| CC70235 | 69 | 63 |
| CC70236 | 53 | 64 |
| CC70237 | 50 | 64 |
| CC70238 | 48 | 64 |
| CC70252 | 93 | 27 |
| CC70253 | 94 | 58 |
| CC70254 | 91 | 58 |
| CC70255 | 88 | 43 |
| CC70262 | 110 | 32 |
| CC70263 | 99 | 58 |
| CC70264 | 93 | 51 |
| CC70265 | 97 | 48 |
| CC70266 | 106 | 47 |
| CC70271 | 106 | 50 |
| CC70273 | 88 | 38 |
| CC70275 | 94 | 38 |
| CC70276 | 99 | 38 |
| CC70277 | 106 | 38 |
| CC70281 | 82 | 46 |
| CC70282 | 74 | 48 |
| CC70283 | 74 | 50 |
| CC70284 | 74 | 53 |
| CC70285 | 74 | 56 |
| CC70286 | 74 | 58 |
| CC70287 | 82 | 48 |
| CC70288 | 82 | 51 |
| CC70289 | 82 | 53 |
| CC70290 | 82 | 56 |
| CC70291 | 82 | 58 |
| CC70292 | 74 | 61 |
| CC70301 | 118 | 51 |
| CC70305 | 147 | 60 |
| CC70310 | 127 | 58 |
| CC70311 | 127 | 55 |
| CC70314 | 139 | 19 |
| CC70315 | 136 | 19 |
| CC70320 | 119 | 66 |
| CC70321 | 123 | 67 |
| CC70323 | 142 | 40 |
| CC70325 | 143 | 37 |
| CC70402 | 180 | 53 |
| CC70410 | 152 | 51 |
| CC70430 | 164 | 50 |
| CC70438 | 172 | 62 |
| CC70445 | 17 | 117 |
| CC70465 | 14 | 85 |
| CC70467 | 11 | 89 |
| CC70471 | 120 | 38 |
| CC70475 | 149 | 42 |
| CC70477 | 120 | 5 |
| CC70480 | 125 | 5 |
| CC70481 | 130 | 5 |
| CC70482 | 148 | 19 |
| CC80005 | 63 | 14 |
| CC80006 | 109 | 15 |
| CC80007 | 149 | 13 |
| CC80008 | 60 | 5 |
| CC80009 | 56 | 15 |
| CC80010 | 50 | 5 |
| CC80011 | 43 | 7 |
| CC80012 | 199 | 14 |
| CC80013 | 206 | 7 |
| CC80014 | 65 | 5 |
| CC80015 | 41 | 9 |
| CC80016 | 52 | 14 |
| CC80017 | 96 | 5 |
| CC80018 | 97 | 15 |
| CC80019 | 105 | 5 |
| CC80020 | 110 | 5 |
| CC80022 | 113 | 15 |
| CC80023 | 115 | 5 |
| CC80024 | 21 | 140 |
| CC80025 | 117 | 15 |
| CC80026 | 182 | 15 |
| CC80027 | 181 | 5 |
| CC80029 | 185 | 14 |
| CC80030 | 185 | 5 |
| CC80032 | 191 | 14 |
| CC80033 | 191 | 5 |
| CC80034 | 200 | 5 |
| CC80035 | 195 | 14 |
| CC80064 | 37 | 100 |
| CC80068 | 29 | 106 |
| CC80103 | 14 | 143 |
| CC80191 | 69 | 84 |
| CC80192 | 65 | 84 |
| CC80193 | 62 | 84 |
| CC80199 | 62 | 80 |
| CC80201 | 66 | 77 |
| CC80206 | 82 | 82 |
| CC80207 | 76 | 81 |
| CC80211 | 37 | 137 |
| CC80232 | 94 | 117 |
| CC80234 | 92 | 106 |
| CC80236 | 112 | 125 |
| CC80242 | 124 | 108 |
| CC80243 | 136 | 102 |
| CC80244 | 121 | 103 |
| CC80246 | 77 | 105 |
| CC80247 | 121 | 119 |
| CC80250 | 15 | 112 |
| CC80251 | 114 | 119 |
| CC80252 | 116 | 119 |
| CC80257 | 111 | 140 |
| CC80258 | 119 | 138 |
| CC80264 | 115 | 130 |
| CC80268 | 112 | 133 |
| CC80271 | 58 | 105 |
| CC80272 | 85 | 94 |
| CC80273 | 73 | 90 |
| CC80276 | 71 | 90 |
| CC80277 | 68 | 90 |
| CC80278 | 65 | 90 |
| CC80281 | 85 | 115 |
| CC80282 | 80 | 111 |
| CC80283 | 71 | 111 |
| CC80286 | 88 | 109 |
| CC80287 | 64 | 111 |
| CC80288 | 62 | 101 |
| CC80291 | 83 | 97 |
| CC80292 | 78 | 89 |
| CC80306 | 163 | 80 |
| CC80311 | 159 | 84 |
| CC82001 | 103 | 131 |
| CC82041 | 54 | 124 |
| CC82042 | 60 | 124 |
| CD70125 | 132 | 25 |
| CD70126 | 132 | 23 |
| CD70128 | 125 | 25 |
| CD70227 | 80 | 30 |
| CD70305 | 148 | 63 |
| CD70306 | 38 | 151 |
| CD80064 | 27 | 109 |
| CD80101 | 198 | 37 |
| CD80259 | 119 | 130 |
| CD82003 | 98 | 135 |
| CD82021 | 48 | 120 |
| CIC80250 | 114 | 141 |
| CL70271 | 100 | 43 |
| CL80020 | 183 | 20 |
| CR70001 | 8 | 62 |
| CR70005 | 22 | 27 |
| CR70010 | 19 | 23 |
| CR70011 | 19 | 49 |
| CR70014 | 21 | 23 |
| CR70015 | 26 | 25 |
| CR70016 | 21 | 46 |
| CR70017 | 25 | 50 |
| CR70020 | 13 | 18 |
| CR70021 | 10 | 25 |
| CR70022 | 10 | 27 |
| CR70025 | 21 | 10 |
| CR70026 | 19 | 18 |
| CR70027 | 16 | 18 |
| CR70030 | 34 | 16 |
| CR70031 | 28 | 18 |
| CR70032 | 25 | 18 |
| CR70035 | 7 | 28 |
| CR70036 | 8 | 40 |
| CR70037 | 9 | 44 |
| CR70077 | 105 | 108 |
| CR70083 | 151 | 39 |
| CR70097 | 13 | 68 |
| CR70120 | 125 | 36 |
| CR70123 | 126 | 33 |
| CR70125 | 139 | 23 |
| CR70126 | 150 | 22 |
| CR70128 | 126 | 23 |
| CR70151 | 17 | 78 |
| CR70154 | 114 | 94 |
| CR70156 | 14 | 76 |
| CR70180 | 213 | 18 |
| CR70181 | 209 | 15 |
| CR70182 | 201 | 18 |
| CR70206 | 61 | 65 |
| CR70221 | 60 | 42 |
| CR70223 | 73 | 63 |
| CR70225 | 70 | 42 |
| CR70226 | 76 | 64 |
| CR70228 | 83 | 27 |
| CR70250 | 102 | 38 |
| CR70275 | 103 | 55 |
| CR70276 | 102 | 59 |
| CR70301 | 144 | 52 |
| CR70304 | 141 | 57 |
| CR70305 | 147 | 58 |
| CR70306 | 147 | 67 |
| CR70307 | 147 | 55 |
| CR70308 | 143 | 57 |
| CR70309 | 142 | 62 |
| CR70310 | 144 | 21 |
| CR70311 | 142 | 65 |
| CR70312 | 145 | 72 |
| CR70314 | 122 | 21 |
| CR70315 | 120 | 21 |
| CR70322 | 149 | 44 |
| CR70323 | 144 | 25 |
| CR70324 | 143 | 44 |
| CR70325 | 146 | 25 |
| CR70326 | 145 | 44 |
| CR70331 | 139 | 76 |
| CR70332 | 139 | 73 |
| CR70333 | 139 | 71 |
| CR70334 | 139 | 68 |
| CR70335 | 25 | 92 |
| CR70336 | 25 | 85 |
| CR70337 | 25 | 87 |
| CR70338 | 25 | 90 |
| CR70341 | 130 | 77 |
| CR70352 | 133 | 43 |
| CR70353 | 131 | 43 |
| CR70354 | 128 | 43 |
| CR70356 | 125 | 43 |
| CR70357 | 123 | 43 |
| CR70358 | 120 | 44 |
| CR70411 | 160 | 56 |
| CR70412 | 160 | 60 |
| CR70413 | 152 | 56 |
| CR70414 | 152 | 62 |
| CR70416 | 160 | 65 |
| CR70417 | 149 | 67 |
| CR70419 | 152 | 67 |
| CR70431 | 175 | 54 |
| CR70432 | 178 | 57 |
| CR70433 | 164 | 56 |
| CR70434 | 164 | 60 |
| CR70436 | 176 | 59 |
| CR70437 | 164 | 64 |
| CR70438 | 175 | 62 |
| CR70439 | 164 | 66 |
| CR70465 | 17 | 81 |
| CR70470 | 135 | 50 |
| CR70471 | 126 | 39 |
| CR70472 | 118 | 38 |
| CR70474 | 135 | 48 |
| CR70475 | 156 | 44 |
| CR70478 | 155 | 39 |
| CR80001 | 34 | 123 |
| CR80021 | 10 | 136 |
| CR80022 | 13 | 139 |
| CR80023 | 8 | 138 |
| CR80024 | 107 | 94 |
| CR80026 | 7 | 134 |
| CR80041 | 136 | 84 |
| CR80042 | 134 | 84 |
| CR80063 | 27 | 113 |
| CR80064 | 33 | 110 |
| CR80066 | 40 | 98 |
| CR80067 | 33 | 101 |
| CR80068 | 25 | 104 |
| CR80072 | 102 | 97 |
| CR80073 | 108 | 98 |
| CR80074 | 107 | 93 |
| CR80087 | 10 | 128 |
| CR80088 | 10 | 126 |
| CR80097 | 10 | 133 |
| CR80098 | 10 | 131 |
| CR80101 | 201 | 34 |
| CR80103 | 196 | 50 |
| CR80105 | 196 | 30 |
| CR80106 | 98 | 79 |
| CR80107 | 101 | 87 |
| CR80111 | 98 | 78 |
| CR80112 | 101 | 85 |
| CR80116 | 85 | 86 |
| CR80126 | 104 | 105 |
| CR80138 | 90 | 93 |
| CR80146 | 90 | 95 |
| CR80147 | 90 | 97 |
| CR80148 | 90 | 98 |
| CR80166 | 56 | 90 |
| CR80167 | 54 | 90 |
| CR80168 | 52 | 90 |
| CR80176 | 48 | 90 |
| CR80177 | 58 | 91 |
| CR80178 | 48 | 93 |
| CR80186 | 46 | 95 |
| CR80187 | 44 | 95 |
| CR80188 | 57 | 78 |
| CR80196 | 63 | 80 |
| CR80197 | 63 | 84 |
| CR80198 | 67 | 84 |
| CR80201 | 13 | 71 |
| CR80206 | 79 | 81 |
| CR80208 | 41 | 133 |
| CR80209 | 65 | 99 |
| CR80210 | 65 | 97 |
| CR80211 | 32 | 137 |
| CR80212 | 108 | 140 |
| CR80213 | 90 | 91 |
| CR80214 | 89 | 91 |
| CR80215 | 98 | 90 |
| CR80218 | 73 | 77 |
| CR80219 | 26 | 137 |
| CR80221 | 71 | 77 |
| CR80222 | 69 | 77 |
| CR80223 | 85 | 77 |
| CR80226 | 57 | 80 |
| CR80227 | 93 | 111 |
| CR80228 | 90 | 115 |
| CR80231 | 90 | 117 |
| CR80232 | 91 | 111 |
| CR80243 | 45 | 136 |
| CR80244 | 46 | 117 |
| CR80245 | 59 | 100 |
| CR80255 | 57 | 100 |
| CR80257 | 114 | 137 |
| CR80258 | 121 | 134 |
| CR80259 | 125 | 129 |
| CR80260 | 43 | 105 |
| CR80264 | 118 | 127 |
| CR80266 | 43 | 128 |
| CR80268 | 114 | 133 |
| CR80306 | 106 | 79 |
| CR80307 | 101 | 83 |
| CR80308 | 101 | 78 |
| CR80311 | 106 | 81 |
| CR80312 | 101 | 81 |
| CR80313 | 105 | 83 |
| CR82001 | 86 | 120 |
| CR82002 | 83 | 122 |
| CR82004 | 97 | 138 |
| CR82022 | 48 | 118 |
| CR84041 | 63 | 120 |
| CR84042 | 68 | 123 |
| CT70410 | 157 | 53 |
| CT70412 | 157 | 59 |
| CT70415 | 157 | 65 |
| CT70430 | 168 | 53 |
| CT70432 | 168 | 59 |
| CT70435 | 168 | 65 |
| CT80021 | 17 | 138 |
| CT80022 | 17 | 132 |
| CT80068 | 33 | 106 |
| CT80105 | 203 | 39 |

# Feature-Modul / Feature Module 295042032800

**Bestückungsseite, Ansicht von oben / Component Side, Top View**



# Feature-Modul / Feature Module 295042032800

## Koordinaten für die Chip-Bauteile der Bestückungsseite (Oberseite)
## Coordinates of the Chip Components on the Components Side (Top Side)

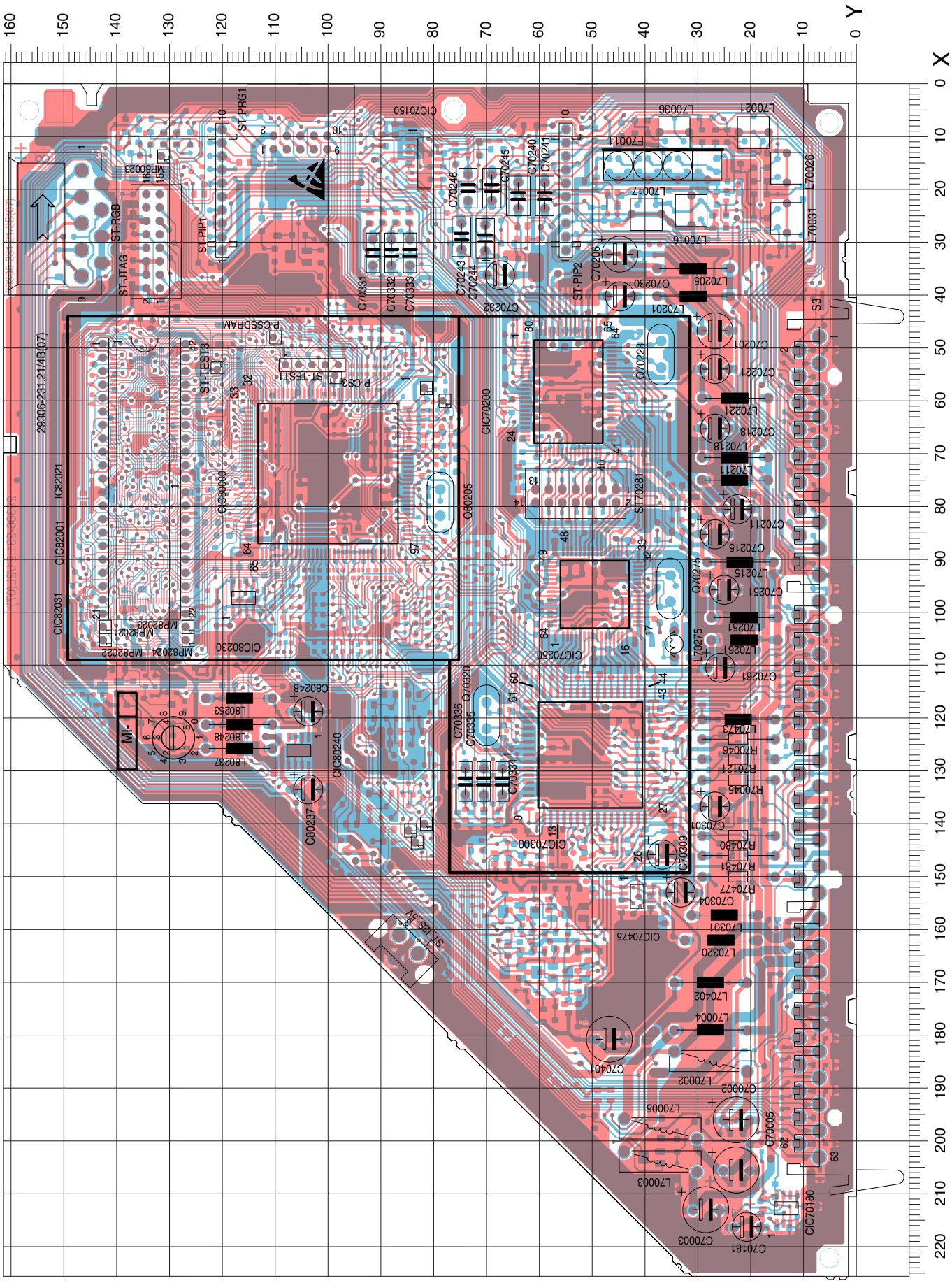
| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CC70004 | 191 | 49 |
| CC70010 | 27 | 26 |
| CC70081 | 188 | 56 |
| CC70082 | 178 | 65 |
| CC70083 | 167 | 76 |
| CC70084 | 146 | 98 |
| CC70154 | 23 | 82 |
| CC70162 | 11 | 73 |
| CC70180 | 212 | 18 |
| CC70200 | 44 | 20 |
| CC70226 | 77 | 65 |
| CC70302 | 112 | 50 |
| CC70303 | 133 | 34 |
| CC70306 | 137 | 35 |
| CC70308 | 141 | 34 |
| CC70309 | 122 | 34 |
| CC70313 | 147 | 69 |
| CC70316 | 145 | 52 |
| CC70418 | 159 | 70 |
| CC70420 | 164 | 56 |
| CC70428 | 157 | 71 |
| CC70455 | 88 | 63 |
| CC70460 | 165 | 51 |
| CC70461 | 173 | 53 |
| CC70464 | 169 | 60 |
| CC70476 | 158 | 36 |
| CC80021 | 11 | 140 |
| CC80031 | 123 | 83 |
| CC80037 | 117 | 92 |
| CC80071 | 91 | 110 |
| CC80072 | 83 | 117 |
| CC80073 | 77 | 117 |
| CC80074 | 68 | 117 |
| CC80075 | 56 | 113 |
| CC80076 | 116 | 143 |
| CC80081 | 137 | 93 |
| CC80114 | 89 | 81 |
| CC80121 | 95 | 108 |
| CC80122 | 97 | 108 |
| CC80123 | 99 | 108 |
| CC80131 | 101 | 108 |
| CC80132 | 97 | 102 |
| CC80133 | 98 | 102 |
| CC80142 | 100 | 102 |
| CC80143 | 102 | 102 |
| CC80144 | 97 | 96 |
| CC80151 | 99 | 96 |
| CC80153 | 103 | 96 |
| CC80161 | 97 | 90 |
| CC80162 | 99 | 90 |
| CC80163 | 101 | 90 |
| CC80171 | 51 | 84 |
| CC80172 | 49 | 84 |
| CC80173 | 48 | 88 |
| CC80174 | 48 | 90 |
| CC80181 | 48 | 92 |
| CC80182 | 48 | 94 |
| CC80183 | 48 | 96 |
| CC80184 | 50 | 96 |
| CC80202 | 68 | 80 |
| CC80204 | 27 | 63 |
| CC80205 | 71 | 81 |
| CC80208 | 66 | 77 |
| CC80209 | 71 | 78 |
| CC80210 | 71 | 80 |
| CC80213 | 92 | 86 |
| CC80214 | 94 | 86 |
| CC80233 | 140 | 96 |
| CC80249 | 96 | 145 |
| CC80254 | 56 | 103 |
| CC82005 | 78 | 123 |
| CC82021 | 100 | 124 |
| CC82031 | 106 | 145 |
| CC82043 | 74 | 145 |
| CC84044 | 60 | 144 |
| CC84046 | 56 | 144 |
| CC84047 | 47 | 141 |
| CC84078 | 48 | 144 |
| CC84079 | 61 | 120 |
| CIC70150 | 15 | 82 |
| CIC70180 | 213 | 13 |
| CIC70200 | 58 | 54 |
| CIC70250 | 97 | 49 |
| CIC70300 | 127 | 50 |
| CIC70475 | 154 | 42 |
| CIC80000 | 74 | 100 |
| CIC80230 | 97 | 116 |
| CIC80240 | 126 | 106 |
| CIC82001 | 88 | 135 |
| CIC82031 | 102 | 146 |
| CIC82041 | 62 | 135 |
| CL70321 | 117 | 66 |
| CL70322 | 123 | 66 |
| CL80109 | 95 | 81 |
| CL80110 | 97 | 80 |
| CL80119 | 98 | 77 |
| CL80120 | 102 | 77 |
| CL80256 | 65 | 120 |
| CNW80121 | 93 | 103 |
| CNW80132 | 93 | 98 |
| CNW80144 | 93 | 94 |
| CNW80161 | 93 | 90 |
| CNW80171 | 54 | 90 |
| CNW80181 | 54 | 94 |
| CNW80191 | 63 | 81 |
| CR70004 | 25 | 26 |
| CR70006 | 191 | 47 |
| CR70012 | 19 | 51 |
| CR70013 | 21 | 46 |
| CR70028 | 78 | 34 |
| CR70098 | 15 | 116 |
| CR70152 | 16 | 88 |
| CR70159 | 13 | 76 |
| CR70161 | 14 | 73 |
| CR70207 | 61 | 67 |
| CR70224 | 73 | 64 |
| CR70227 | 76 | 34 |
| CR70229 | 85 | 34 |
| CR70244 | 11 | 90 |
| CR70245 | 9 | 87 |
| CR70302 | 143 | 47 |
| CR70303 | 115 | 34 |
| CR70313 | 147 | 66 |
| CR70316 | 145 | 47 |
| CR70319 | 119 | 33 |
| CR70342 | 138 | 74 |
| CR70343 | 138 | 71 |
| CR70344 | 138 | 68 |
| CR70345 | 25 | 92 |
| CR70346 | 25 | 84 |
| CR70347 | 25 | 87 |
| CR70348 | 25 | 90 |
| CR70410 | 144 | 44 |
| CR70418 | 155 | 75 |
| CR70420 | 143 | 43 |
| CR70421 | 155 | 61 |
| CR70422 | 155 | 63 |
| CR70423 | 155 | 58 |
| CR70424 | 164 | 60 |
| CR70426 | 155 | 66 |
| CR70427 | 165 | 63 |
| CR70428 | 155 | 73 |
| CR70429 | 164 | 66 |
| CR70430 | 143 | 41 |
| CR70455 | 96 | 62 |
| CR70461 | 173 | 55 |
| CR70463 | 169 | 53 |
| CR70464 | 169 | 62 |
| CR70473 | 117 | 29 |
| CR70476 | 152 | 49 |
| CR70477 | 152 | 47 |
| CR80004 | 99 | 73 |
| CR80006 | 102 | 72 |
| CR80007 | 92 | 74 |
| CR80009 | 131 | 81 |
| CR80032 | 123 | 87 |
| CR80033 | 125 | 87 |
| CR80034 | 116 | 84 |
| CR80036 | 116 | 88 |
| CR80037 | 120 | 92 |
| CR80071 | 107 | 102 |
| CR80076 | 116 | 147 |
| CR80077 | 141 | 89 |
| CR80078 | 143 | 89 |
| CR80081 | 134 | 93 |
| CR80082 | 134 | 89 |
| CR80089 | 10 | 128 |
| CR80090 | 21 | 124 |
| CR80099 | 10 | 131 |
| CR80114 | 86 | 81 |
| CR80117 | 105 | 111 |
| CR80118 | 105 | 109 |
| CR80119 | 105 | 107 |
| CR80127 | 107 | 97 |
| CR80128 | 107 | 96 |
| CR80136 | 107 | 101 |
| CR80137 | 107 | 99 |
| CR80152 | 101 | 96 |
| CR80156 | 107 | 94 |
| CR80157 | 107 | 92 |
| CR80158 | 107 | 90 |
| CR80192 | 52 | 81 |
| CR80193 | 50 | 81 |
| CR80199 | 60 | 81 |
| CR80203 | 68 | 82 |
| CR80204 | 30 | 63 |
| CR80216 | 87 | 71 |
| CR80217 | 89 | 71 |
| CR80238 | 78 | 146 |
| CR80240 | 96 | 122 |
| CR80241 | 52 | 144 |
| CR80250 | 48 | 103 |
| CR80251 | 47 | 107 |
| CR80252 | 47 | 105 |
| CR80253 | 49 | 101 |
| CR80254 | 49 | 100 |
| CR80265 | 71 | 124 |
| CR82005 | 78 | 125 |
| CR82031 | 99 | 146 |
| CT70011 | 26 | 46 |
| CT70015 | 21 | 26 |
| CT70155 | 10 | 67 |
| CT70227 | 81 | 34 |
| CT70305 | 144 | 72 |
| CT70306 | 147 | 63 |
| CT70420 | 160 | 56 |
| CT70422 | 160 | 60 |
| CT70425 | 160 | 64 |
| CT70465 | 169 | 56 |
| CT70470 | 127 | 34 |
| CT80004 | 99 | 70 |
| CT80008 | 93 | 71 |
| CT80009 | 128 | 81 |
| CT80033 | 119 | 88 |
| CT80034 | 119 | 84 |
| CT80041 | 135 | 85 |
| CT80042 | 131 | 85 |
| CT80075 | 118 | 145 |
| CT80077 | 118 | 80 |
| CT80080 | 138 | 89 |
| CT80085 | 10 | 125 |
| CT80090 | 10 | 134 |
| CT80095 | 17 | 125 |
| CT80108 | 101 | 84 |
| CT80110 | 105 | 84 |
| CT80204 | 32 | 38 |
| CT80308 | 101 | 80 |
| CT80310 | 105 | 80 |

## Koordinaten für die Bauteile der Bestückungsseite (Oberseite)
## Coordinates of the Components on the Components Side (Top Side)

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| C70002 | 196 | 23 |
| C70003 | 213 | 29 |
| C70005 | 206 | 23 |
| C70181 | 216 | 21 |
| C70201 | 47 | 27 |
| C70206 | 32 | 45 |
| C70211 | 80 | 23 |
| C70215 | 85 | 27 |
| C70218 | 65 | 27 |
| C70221 | 54 | 27 |
| C70230 | 40 | 45 |
| C70232 | 36 | 67 |
| C70240 | 21 | 64 |
| C70241 | 21 | 59 |
| C70243 | 29 | 75 |
| C70244 | 29 | 70 |
| C70245 | 20 | 69 |
| C70246 | 20 | 73 |
| C70251 | 95 | 25 |
| C70261 | 110 | 26 |
| C70301 | 136 | 27 |
| C70304 | 153 | 33 |
| C70309 | 145 | 37 |
| C70331 | 32 | 91 |
| C70332 | 32 | 88 |
| C70333 | 32 | 84 |
| C70334 | 132 | 67 |
| C70335 | 132 | 71 |
| C70336 | 132 | 74 |
| C70401 | 181 | 47 |
| C80237 | 133 | 104 |
| C80248 | 118 | 104 |
| F70011 | 15 | 37 |
| IC82021 | 75 | 135 |
| L70002 | 185 | 28 |
| L70003 | 204 | 37 |
| L70004 | 179 | 28 |
| L70005 | 198 | 37 |
| L70016 | 24 | 31 |
| L70017 | 25 | 40 |
| L70021 | 9 | 20 |
| L70026 | 16 | 13 |
| L70031 | 25 | 13 |
| L70036 | 9 | 35 |
| L70201 | 40 | 31 |
| L70205 | 35 | 31 |
| L70211 | 75 | 23 |
| L70215 | 91 | 22 |
| L70218 | 71 | 23 |
| L70221 | 59 | 23 |
| L70251 | 101 | 21 |
| L70261 | 105 | 21 |
| L70275 | 106 | 35 |
| L70301 | 157 | 25 |
| L70320 | 162 | 26 |
| L70402 | 170 | 28 |
| L70473 | 120 | 22 |
| L80237 | 126 | 117 |
| L80248 | 121 | 117 |
| L80253 | 116 | 117 |
| P-CS03 | 56 | 99 |
| P-CSSDRAM | 48 | 110 |
| P10 | 140 | 81 |
| P11 | 143 | 83 |
| P12 | 58 | 81 |
| P13 | 60 | 78 |
| P14 | 141 | 84 |
| Q70228 | 51 | 37 |
| Q70275 | 96 | 35 |
| Q70320 | 119 | 70 |
| Q80205 | 79 | 79 |
| R70045 | 132 | 22 |
| R70046 | 124 | 22 |
| R70121 | 128 | 22 |
| R70477 | 150 | 22 |
| R70480 | 142 | 22 |
| R70481 | 146 | 22 |
| S03 | 125 | 2 |
| ST-JTAG | 30 | 133 |
| ST-PIP01 | 20 | 120 |
| ST-PIP02 | 20 | 55 |
| ST-PRG01 | 6 | 105 |
| ST-RGB | 27 | 152 |
| ST-TEST03 | 54 | 121 |
| ST-TEST01 | 53 | 103 |
| ST70281 | 78 | 53 |
| ST_I2S_5V | 164 | 86 |

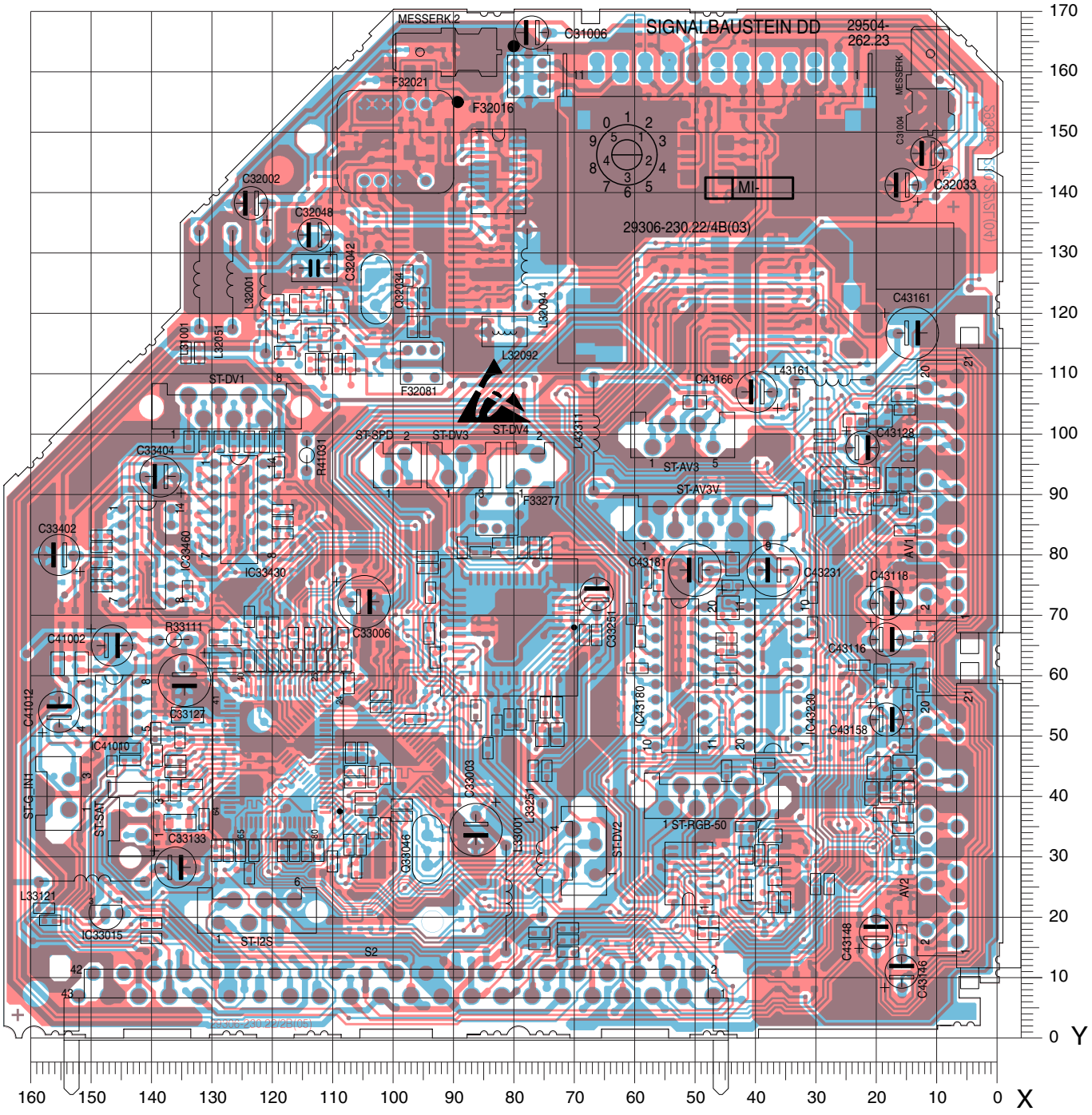
# Feature-Modul / Feature Module 295042032800

**Bestückungsseite, Ansicht von oben / Component Side, Top View**



# Signal-Baustein / Signal Module 295042622300

**Bestückungsseite, Ansicht von oben / Component Side, Top View**




| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| AN10 | 5 | 0 |
| AN12 | 170 | 176 |
| AN13 | 5 | 176 |
| AV01 | 6 | 91 |
| AV02 | 6 | 35 |
| C31004 | 13 | 146 |
| C31006 | 78 | 166 |
| C32002 | 125 | 138 |
| C32033 | 17 | 141 |
| C32042 | 114 | 127 |
| C32048 | 114 | 133 |
| C33003 | 87 | 35 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| C33006 | 106 | 72 |
| C33127 | 135 | 60 |
| C33133 | 137 | 28 |
| C33251 | 68 | 73 |
| C33402 | 156 | 80 |
| C33404 | 139 | 93 |
| C41002 | 148 | 65 |
| C41012 | 156 | 54 |
| C43116 | 19 | 66 |
| C43118 | 19 | 72 |
| C43128 | 23 | 98 |
| C43146 | 17 | 11 |
| C43148 | 21 | 18 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| C43158 | 19 | 53 |
| C43161 | 15 | 117 |
| C43166 | 41 | 107 |
| C43181 | 51 | 78 |
| C43231 | 38 | 78 |
| F32016 | 78 | 159 |
| F32021 | 101 | 148 |
| F32081 | 96 | 112 |
| F33277 | 84 | 87 |
| IC33015 | 149 | 20 |
| IC33430 | 126 | 88 |
| IC33460 | 142 | 80 |
| IC41010 | 147 | 55 |

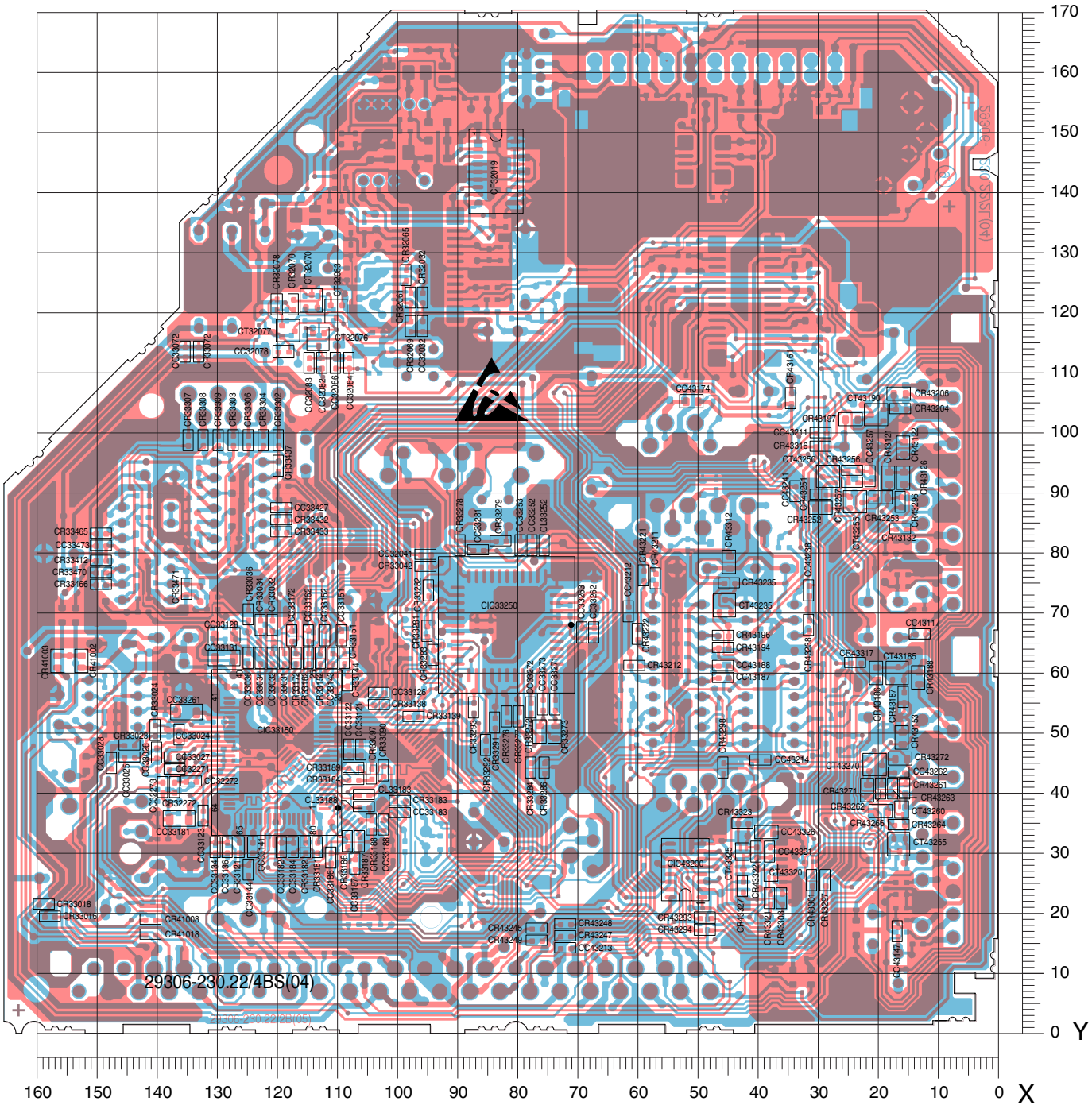
| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| IC43180 | 53 | 60 |
| IC43230 | 38 | 60 |
| L31001 | 133 | 126 |
| L32001 | 122 | 124 |
| L32051 | 127 | 126 |
| L32092 | 83 | 117 |
| L32094 | 79 | 128 |
| L33001 | 82 | 23 |
| L33121 | 151 | 26 |
| L33251 | 76 | 30 |
| L43161 | 28 | 109 |
| L43311 | 68 | 100 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| MESSERK. | 12 | 158 |
| MESSERK.02 | 92 | 163 |
| Q32034 | 104 | 124 |
| Q33046 | 95 | 31 |
| R33111 | 137 | 66 |
| R41031 | 115 | 97 |
| S02 | 100 | 2 |
| ST-AV03 | 53 | 100 |
| ST-AV03V | 49 | 86 |
| ST-DV01 | 128 | 105 |
| ST-DV02 | 69 | 31 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| ST-DV03 | 89 | 95 |
| ST-DV04 | 78 | 95 |
| ST-G_IN01 | 156 | 41 |
| ST-I02S | 124 | 21 |
| ST-RGB-50 | 48 | 40 |
| ST-SAT | 144 | 36 |
| ST-SPD | 100 | 95 |
| TUNER | 41 | 137 |

# Signal-Baustein / Signal Module 295042622300

**Bestückungsseite, Ansicht von oben / Component Side, Top View**



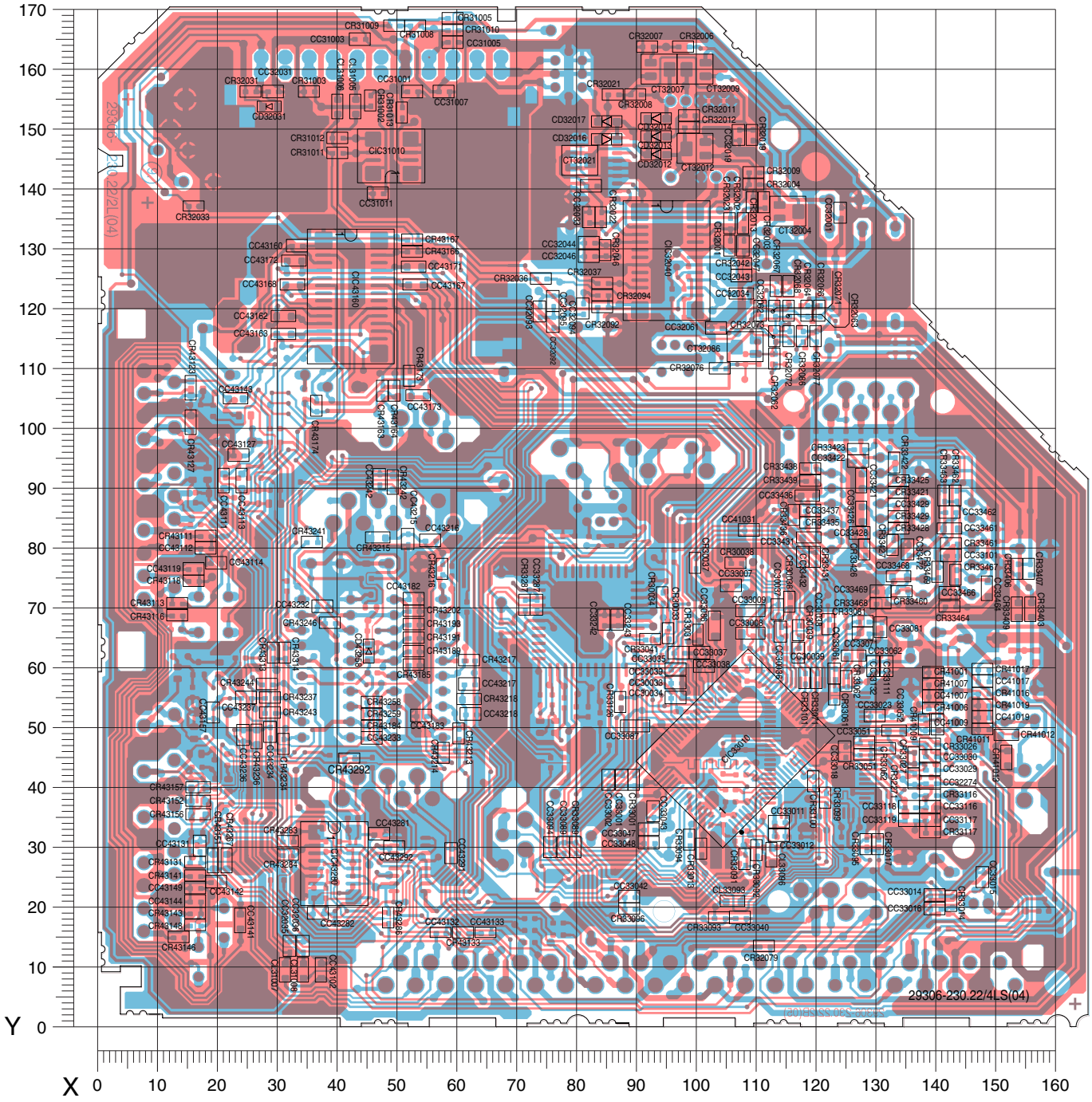
# Signal-Baustein / Signal Module 295042622300

**Koordinaten für die Chip-Bauteile der Bestückungsseite (Oberseite)**
**Coordinates of the Chip Components on the Components Side (Top Side)**

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CC32032 | 96 | 118 |
| CC32041 | 95 | 80 |
| CC32078 | 119 | 114 |
| CC32082 | 113 | 112 |
| CC32083 | 115 | 112 |
| CC32084 | 108 | 112 |
| CC32086 | 110 | 112 |
| CC32271 | 137 | 44 |
| CC32272 | 134 | 42 |
| CC32273 | 139 | 41 |
| CC33024 | 136 | 50 |
| CC33025 | 144 | 46 |
| CC33026 | 140 | 47 |
| CC33027 | 137 | 46 |
| CC33028 | 148 | 45 |
| CC33031 | 119 | 63 |
| CC33032 | 121 | 63 |
| CC33034 | 123 | 63 |
| CC33036 | 125 | 63 |
| CC33072 | 135 | 114 |
| CC33121 | 106 | 47 |
| CC33122 | 108 | 47 |
| CC33123 | 132 | 36 |
| CC33126 | 103 | 57 |
| CC33128 | 129 | 66 |
| CC33131 | 129 | 63 |
| CC33134 | 130 | 31 |
| CC33136 | 128 | 31 |
| CC33141 | 124 | 31 |
| CC33143 | 111 | 63 |
| CC33144 | 125 | 27 |
| CC33151 | 109 | 66 |
| CC33152 | 112 | 66 |
| CC33162 | 115 | 66 |
| CC33172 | 117 | 66 |
| CC33181 | 136 | 36 |
| CC33182 | 119 | 31 |
| CC33183 | 99 | 37 |
| CC33184 | 117 | 31 |
| CC33186 | 111 | 29 |
| CC33187 | 107 | 28 |
| CC33188 | 102 | 35 |
| CC33252 | 78 | 81 |
| CC33253 | 80 | 81 |
| CC33261 | 135 | 53 |
| CC33262 | 67 | 67 |
| CC33263 | 69 | 67 |
| CC33271 | 74 | 55 |
| CC33272 | 78 | 54 |
| CC33273 | 76 | 55 |
| CC33281 | 86 | 81 |
| CC33427 | 119 | 88 |
| CC33473 | 149 | 81 |
| CC43117 | 13 | 67 |
| CC43147 | 17 | 17 |
| CC43174 | 51 | 105 |
| CC43187 | 46 | 59 |
| CC43188 | 46 | 61 |
| CC43211 | 30 | 100 |
| CC43212 | 62 | 70 |
| CC43213 | 72 | 14 |
| CC43214 | 40 | 46 |
| CC43238 | 32 | 74 |
| CC43241 | 34 | 90 |
| CC43257 | 21 | 93 |
| CC43262 | 16 | 43 |
| CC43321 | 38 | 30 |
| CC43326 | 38 | 33 |
| CF32019 | 84 | 143 |
| CIC33150 | 120 | 47 |
| CIC33250 | 82 | 68 |
| CIC43290 | 52 | 27 |
| CL33183 | 106 | 40 |
| CL33188 | 106 | 38 |
| CL33252 | 76 | 81 |
| CR32032 | 96 | 123 |
| CR32061 | 98 | 123 |
| CR32065 | 98 | 126 |
| CR32069 | 98 | 118 |
| CR32070 | 117 | 121 |
| CR32078 | 120 | 121 |
| CR32272 | 137 | 41 |
| CR33016 | 158 | 20 |
| CR33018 | 159 | 22 |
| CR33023 | 144 | 48 |
| CR33024 | 140 | 51 |
| CR33032 | 121 | 68 |
| CR33034 | 123 | 68 |
| CR33036 | 125 | 70 |
| CR33042 | 95 | 78 |
| CR33072 | 133 | 114 |
| CR33090 | 102 | 44 |
| CR33097 | 104 | 43 |
| CR33121 | 126 | 31 |
| CR33138 | 103 | 55 |
| CR33139 | 97 | 53 |
| CR33144 | 108 | 59 |
| CR33151 | 109 | 63 |
| CR33152 | 113 | 63 |
| CR33162 | 115 | 63 |
| CR33172 | 117 | 63 |
| CR33181 | 113 | 31 |
| CR33182 | 115 | 31 |
| CR33183 | 99 | 39 |
| CR33184 | 107 | 42 |
| CR33186 | 108 | 32 |
| CR33187 | 106 | 32 |
| CR33188 | 104 | 35 |
| CR33189 | 107 | 44 |
| CR33272 | 76 | 50 |
| CR33273 | 74 | 50 |
| CR33276 | 82 | 53 |
| CR33277 | 80 | 53 |
| CR33278 | 90 | 81 |
| CR33279 | 83 | 82 |
| CR33281 | 95 | 67 |
| CR33282 | 95 | 74 |
| CR33283 | 94 | 63 |
| CR33284 | 78 | 44 |
| CR33286 | 76 | 44 |
| CR33291 | 84 | 52 |
| CR33292 | 85 | 48 |
| CR33293 | 87 | 54 |
| CR33302 | 120 | 99 |
| CR33303 | 127 | 99 |
| CR33304 | 122 | 99 |
| CR33306 | 125 | 99 |
| CR33307 | 135 | 99 |
| CR33308 | 132 | 99 |
| CR33309 | 130 | 99 |
| CR33412 | 149 | 79 |
| CR33432 | 119 | 86 |
| CR33433 | 119 | 84 |
| CR33437 | 120 | 94 |
| CR33465 | 149 | 83 |
| CR33466 | 149 | 75 |
| CR33470 | 149 | 77 |
| CR33471 | 135 | 74 |
| CR41002 | 152 | 62 |
| CR41003 | 157 | 62 |
| CR41008 | 141 | 19 |
| CR41018 | 141 | 16 |
| CR43121 | 18 | 93 |
| CR43122 | 16 | 98 |
| CR43126 | 16 | 93 |
| CR43132 | 16 | 84 |
| CR43153 | 16 | 49 |
| CR43161 | 35 | 106 |
| CR43186 | 20 | 60 |
| CR43187 | 16 | 56 |
| CR43188 | 13 | 59 |
| CR43194 | 46 | 64 |
| CR43196 | 46 | 66 |
| CR43197 | 25 | 102 |
| CR43204 | 16 | 104 |
| CR43206 | 16 | 107 |
| CR43211 | 57 | 76 |
| CR43212 | 61 | 61 |
| CR43221 | 59 | 76 |
| CR43222 | 60 | 67 |
| CR43235 | 45 | 75 |
| CR43238 | 32 | 68 |
| CR43245 | 77 | 18 |
| CR43247 | 72 | 16 |
| CR43248 | 72 | 18 |
| CR43249 | 77 | 15 |
| CR43251 | 30 | 90 |
| CR43252 | 30 | 88 |
| CR43253 | 20 | 89 |
| CR43256 | 24 | 94 |
| CR43257 | 24 | 92 |
| CR43261 | 15 | 41 |
| CR43262 | 20 | 41 |
| CR43263 | 18 | 41 |
| CR43264 | 16 | 35 |
| CR43266 | 20 | 37 |
| CR43271 | 22 | 41 |
| CR43272 | 16 | 46 |
| CR43293 | 49 | 19 |
| CR43294 | 49 | 17 |
| CR43296 | 16 | 89 |
| CR43297 | 29 | 25 |
| CR43298 | 46 | 44 |
| CR43301 | 31 | 25 |
| CR43303 | 36 | 23 |
| CR43312 | 45 | 78 |
| CR43316 | 30 | 98 |
| CR43317 | 24 | 62 |
| CR43321 | 38 | 23 |
| CR43322 | 40 | 30 |
| CR43323 | 43 | 35 |
| CR43327 | 43 | 25 |
| CT32063 | 110 | 120 |
| CT32070 | 114 | 122 |
| CT32076 | 113 | 116 |
| CT32077 | 118 | 117 |
| CT43185 | 17 | 60 |
| CT43190 | 20 | 103 |
| CT43235 | 46 | 71 |
| CT43250 | 28 | 93 |
| CT43255 | 24 | 89 |
| CT43260 | 16 | 37 |
| CT43265 | 16 | 32 |
| CT43270 | 20 | 45 |
| CT43320 | 38 | 27 |
| CT43325 | 43 | 30 |
| OM05 | 163 | 4 |
| OM06 | 5 | 155 |
| OM43 | 77 | 63 |
| OM44 | 86 | 73 |
| OM45 | 123 | 53 |
| OM46 | 116 | 41 |
| OM47 | 5 | 150 |
| OM48 | 160 | 8 |

# Signal-Baustein / Signal Module 295042622300

**Lötseite, Ansicht von unten / Solder Side, Bottom View**



# Signal-Baustein / Signal Module 295042622300

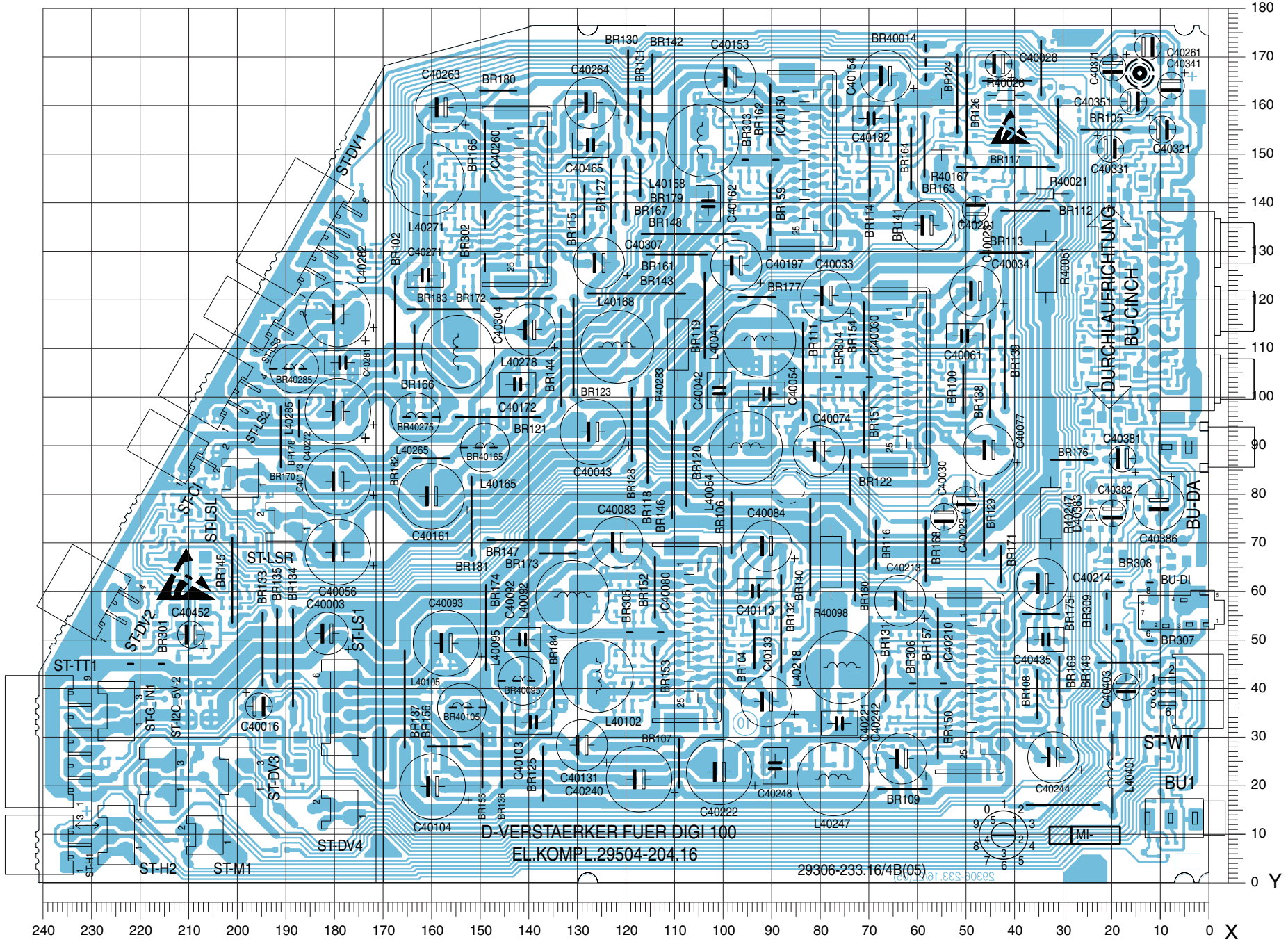
**Koordinaten für die Bauteile der Lötseite (Unterseite)**

**Coordinates of the components on the Solder Side (Bottom Side)**

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CC30033 | 97 | 58 |
| CC30034 | 97 | 55 |
| CC30036 | 114 | 66 |
| CC30037 | 114 | 70 |
| CC30038 | 122 | 67 |
| CC30039 | 117 | 63 |
| CC31001 | 53 | 156 |
| CC31003 | 44 | 165 |
| CC31005 | 59 | 165 |
| CC31007 | 58 | 156 |
| CC31011 | 47 | 139 |
| CC32001 | 124 | 136 |
| CC32019 | 107 | 149 |
| CC32031 | 29 | 156 |
| CC32033 | 82 | 135 |
| CC32034 | 108 | 123 |
| CC32035 | 32 | 14 |
| CC32036 | 34 | 14 |
| CC32043 | 108 | 125 |
| CC32044 | 82 | 131 |
| CC32046 | 82 | 129 |
| CC32047 | 108 | 131 |
| CC32061 | 103 | 117 |
| CC32062 | 111 | 120 |
| CC32092 | 76 | 118 |
| CC32093 | 74 | 119 |
| CC32094 | 81 | 120 |
| CC32095 | 76 | 121 |
| CC32274 | 139 | 41 |
| CC33001 | 88 | 41 |
| CC33002 | 85 | 41 |
| CC33007 | 106 | 74 |
| CC33008 | 109 | 66 |
| CC33009 | 109 | 69 |
| CC33011 | 114 | 34 |
| CC33012 | 114 | 32 |
| CC33014 | 140 | 22 |
| CC33015 | 148 | 25 |
| CC33016 | 140 | 20 |
| CC33018 | 125 | 46 |
| CC33023 | 130 | 52 |
| CC33029 | 139 | 43 |
| CC33030 | 139 | 45 |
| CC33035 | 97 | 63 |
| CC33037 | 100 | 63 |
| CC33038 | 101 | 60 |
| CC33039 | 97 | 60 |
| CC33040 | 107 | 18 |
| CC33042 | 89 | 22 |
| CC33043 | 93 | 36 |
| CC33047 | 92 | 33 |
| CC33048 | 92 | 31 |
| CC33051 | 128 | 48 |
| CC33052 | 133 | 49 |
| CC33061 | 123 | 59 |
| CC33062 | 126 | 62 |
| CC33071 | 128 | 66 |
| CC33081 | 131 | 67 |
| CC33086 | 103 | 67 |
| CC33087 | 90 | 50 |
| CC33089 | 78 | 30 |
| CC33094 | 76 | 30 |
| CC33101 | 142 | 79 |
| CC33111 | 132 | 60 |
| CC33116 | 139 | 37 |
| CC33117 | 139 | 35 |
| CC33118 | 135 | 37 |
| CC33119 | 135 | 35 |
| CC33132 | 130 | 60 |
| CC33242 | 84 | 68 |
| CC33243 | 87 | 68 |
| CC33287 | 73 | 71 |
| CC33421 | 127 | 91 |
| CC33422 | 127 | 94 |
| CC33426 | 127 | 86 |
| CC33428 | 127 | 83 |
| CC33429 | 134 | 87 |
| CC33431 | 119 | 82 |
| CC33432 | 118 | 78 |
| CC33436 | 118 | 89 |
| CC33437 | 119 | 86 |
| CC33461 | 142 | 83 |
| CC33462 | 142 | 86 |
| CC33464 | 149 | 73 |
| CC33466 | 142 | 73 |
| CC33468 | 134 | 75 |
| CC33469 | 131 | 73 |
| CC33472 | 135 | 80 |
| CC41007 | 140 | 55 |
| CC41009 | 140 | 51 |
| CC41017 | 148 | 58 |
| CC41019 | 148 | 52 |
| CC41031 | 109 | 83 |
| CC43102 | 37 | 10 |
| CC43111 | 21 | 91 |
| CC43112 | 18 | 80 |
| CC43113 | 24 | 91 |
| CC43114 | 20 | 78 |
| CC43119 | 16 | 77 |
| CC43127 | 23 | 96 |
| CC43131 | 17 | 30 |
| CC43132 | 57 | 16 |
| CC43133 | 65 | 16 |
| CC43141 | 24 | 18 |
| CC43142 | 20 | 24 |
| CC43143 | 23 | 105 |
| CC43144 | 16 | 21 |
| CC43149 | 16 | 23 |
| CC43157 | 19 | 53 |
| CC43160 | 33 | 131 |
| CC43162 | 31 | 119 |
| CC43163 | 31 | 116 |
| CC43167 | 53 | 124 |
| CC43168 | 33 | 124 |
| CC43171 | 53 | 127 |
| CC43172 | 33 | 128 |
| CC43173 | 53 | 106 |
| CC43182 | 53 | 72 |
| CC43183 | 54 | 52 |
| CC43215 | 52 | 81 |
| CC43216 | 56 | 81 |
| CC43217 | 62 | 57 |
| CC43218 | 62 | 52 |
| CC43232 | 38 | 70 |
| CC43233 | 46 | 48 |
| CC43234 | 29 | 49 |
| CC43236 | 24 | 49 |
| CC43237 | 25 | 55 |
| CC43242 | 47 | 91 |
| CC43281 | 47 | 32 |
| CC43282 | 37 | 19 |
| CC43291 | 59 | 29 |
| CC43292 | 49 | 30 |
| CD32012 | 93 | 146 |
| CD32013 | 93 | 149 |
| CD32014 | 93 | 152 |
| CD32016 | 85 | 148 |
| CD32017 | 85 | 151 |
| CD32031 | 29 | 154 |
| CD43258 | 45 | 63 |
| CIC31010 | 49 | 145 |
| CIC32040 | 95 | 128 |
| CIC33010 | 107 | 47 |
| CIC43160 | 42 | 122 |
| CIC43280 | 40 | 27 |
| CL31005 | 43 | 154 |
| CL31006 | 40 | 154 |
| CL31007 | 31 | 10 |
| CL31008 | 34 | 10 |
| CL33093 | 106 | 21 |
| CL33096 | 113 | 29 |
| CR30033 | 95 | 66 |
| CR30034 | 94 | 72 |
| CR30036 | 116 | 71 |
| CR30037 | 100 | 78 |
| CR30038 | 107 | 78 |
| CR30039 | 117 | 66 |
| CR31002 | 46 | 155 |
| CR31003 | 35 | 156 |
| CR31005 | 59 | 168 |
| CR31008 | 53 | 167 |
| CR31009 | 49 | 167 |
| CR31010 | 59 | 167 |
| CR31011 | 40 | 146 |
| CR31012 | 40 | 149 |
| CR31013 | 51 | 153 |
| CR32001 | 106 | 131 |
| CR32002 | 108 | 134 |
| CR32003 | 111 | 138 |
| CR32004 | 109 | 141 |
| CR32006 | 98 | 164 |
| CR32007 | 92 | 164 |
| CR32008 | 90 | 156 |
| CR32009 | 109 | 143 |
| CR32011 | 99 | 152 |
| CR32012 | 99 | 150 |
| CR32013 | 109 | 138 |
| CR32019 | 109 | 149 |
| CR32021 | 86 | 156 |
| CR32022 | 84 | 135 |
| CR32023 | 106 | 134 |
| CR32031 | 25 | 156 |
| CR32033 | 16 | 137 |
| CR32036 | 74 | 125 |
| CR32037 | 84 | 124 |
| CR32042 | 108 | 127 |
| CR32046 | 85 | 130 |
| CR32062 | 113 | 112 |
| CR32063 | 115 | 120 |
| CR32064 | 118 | 120 |
| CR32066 | 120 | 120 |
| CR32067 | 113 | 124 |
| CR32068 | 115 | 124 |
| CR32071 | 113 | 120 |
| CR32072 | 115 | 115 |
| CR32073 | 113 | 115 |
| CR32076 | 104 | 110 |
| CR32077 | 120 | 115 |
| CR32079 | 111 | 14 |
| CR32086 | 118 | 115 |
| CR32092 | 84 | 120 |
| CR32094 | 84 | 122 |
| CR32271 | 136 | 42 |
| CR33001 | 90 | 41 |
| CR33013 | 101 | 30 |
| CR33014 | 142 | 21 |
| CR33017 | 130 | 30 |
| CR33026 | 139 | 47 |
| CR33027 | 136 | 45 |
| CR33031 | 100 | 65 |
| CR33041 | 92 | 65 |
| CR33051 | 128 | 46 |
| CR33052 | 132 | 47 |
| CR33061 | 123 | 56 |
| CR33062 | 125 | 58 |
| CR33071 | 120 | 58 |
| CR33081 | 128 | 68 |
| CR33089 | 80 | 30 |
| CR33091 | 108 | 28 |
| CR33092 | 110 | 30 |
| CR33093 | 104 | 18 |
| CR33094 | 99 | 31 |
| CR33095 | 128 | 30 |
| CR33096 | 89 | 20 |
| CR33099 | 122 | 38 |
| CR33100 | 119 | 41 |
| CR33101 | 118 | 58 |
| CR33116 | 139 | 39 |
| CR33117 | 139 | 33 |
| CR33126 | 87 | 54 |
| CR33287 | 71 | 71 |
| CR33403 | 156 | 70 |
| CR33406 | 153 | 77 |
| CR33407 | 156 | 77 |
| CR33409 | 153 | 70 |
| CR33421 | 134 | 89 |
| CR33422 | 133 | 94 |
| CR33423 | 127 | 97 |
| CR33425 | 134 | 91 |
| CR33426 | 128 | 80 |
| CR33427 | 133 | 81 |
| CR33428 | 134 | 83 |
| CR33429 | 134 | 85 |
| CR33431 | 120 | 78 |
| CR33435 | 119 | 84 |
| CR33436 | 116 | 86 |
| CR33438 | 119 | 93 |
| CR33439 | 119 | 91 |
| CR33460 | 134 | 73 |
| CR33461 | 142 | 81 |
| CR33462 | 143 | 89 |
| CR33463 | 141 | 89 |
| CR33464 | 142 | 70 |
| CR33467 | 143 | 76 |
| CR33468 | 131 | 71 |
| CR33469 | 140 | 76 |
| CR41001 | 140 | 59 |
| CR41006 | 140 | 53 |
| CR41007 | 140 | 57 |
| CR41009 | 138 | 51 |
| CR41011 | 148 | 50 |
| CR41012 | 152 | 49 |
| CR41013 | 152 | 45 |
| CR41016 | 148 | 56 |
| CR41017 | 148 | 60 |
| CR41019 | 148 | 54 |
| CR43111 | 18 | 82 |
| CR43113 | 13 | 71 |
| CR43116 | 13 | 69 |
| CR43118 | 16 | 74 |
| CR43123 | 15 | 107 |
| CR43127 | 15 | 101 |
| CR43131 | 16 | 28 |
| CR43133 | 61 | 16 |
| CR43141 | 16 | 25 |
| CR43143 | 16 | 19 |
| CR43146 | 14 | 15 |
| CR43148 | 16 | 17 |
| CR43151 | 19 | 28 |
| CR43152 | 17 | 38 |
| CR43156 | 17 | 35 |
| CR43157 | 17 | 40 |
| CR43163 | 48 | 106 |
| CR43164 | 49 | 106 |
| CR43166 | 53 | 130 |
| CR43167 | 53 | 132 |
| CR43173 | 52 | 109 |
| CR43174 | 37 | 104 |
| CR43184 | 46 | 50 |
| CR43185 | 53 | 61 |
| CR43189 | 53 | 63 |
| CR43191 | 53 | 65 |
| CR43193 | 53 | 67 |
| CR43202 | 53 | 69 |
| CR43213 | 60 | 49 |
| CR43214 | 58 | 46 |
| CR43215 | 47 | 82 |
| CR43216 | 58 | 77 |
| CR43217 | 62 | 61 |
| CR43218 | 62 | 55 |
| CR43234 | 31 | 47 |
| CR43236 | 27 | 48 |
| CR43237 | 29 | 55 |
| CR43241 | 36 | 81 |
| CR43242 | 49 | 91 |
| CR43243 | 29 | 53 |
| CR43244 | 28 | 57 |
| CR43246 | 39 | 68 |
| CR43258 | 46 | 54 |
| CR43259 | 46 | 52 |
| CR43267 | 22 | 28 |
| CR43283 | 32 | 31 |
| CR43284 | 32 | 29 |
| CR43286 | 48 | 18 |
| CR43292 | 42 | 45 |
| CR43313 | 29 | 63 |
| CR43314 | 31 | 63 |
| CT32004 | 115 | 136 |
| CT32007 | 94 | 160 |
| CT32009 | 100 | 160 |
| CT32012 | 100 | 147 |
| CT32021 | 81 | 145 |
| CT32086 | 108 | 114 |
| LF01 | 106 | 43 |
| OM01 | 163 | 4 |
| OM02 | 8 | 138 |
| OM04 | 109 | 61 |
| OM30 | 120 | 144 |
| OM40 | 41 | 8 |
| OM41 | 106 | 40 |
| OM42 | 109 | 53 |

# D-Verstärker / D-Amplifier 29504204.1600

**Bestückungsseite, Ansicht von oben / Component Side, Top View**



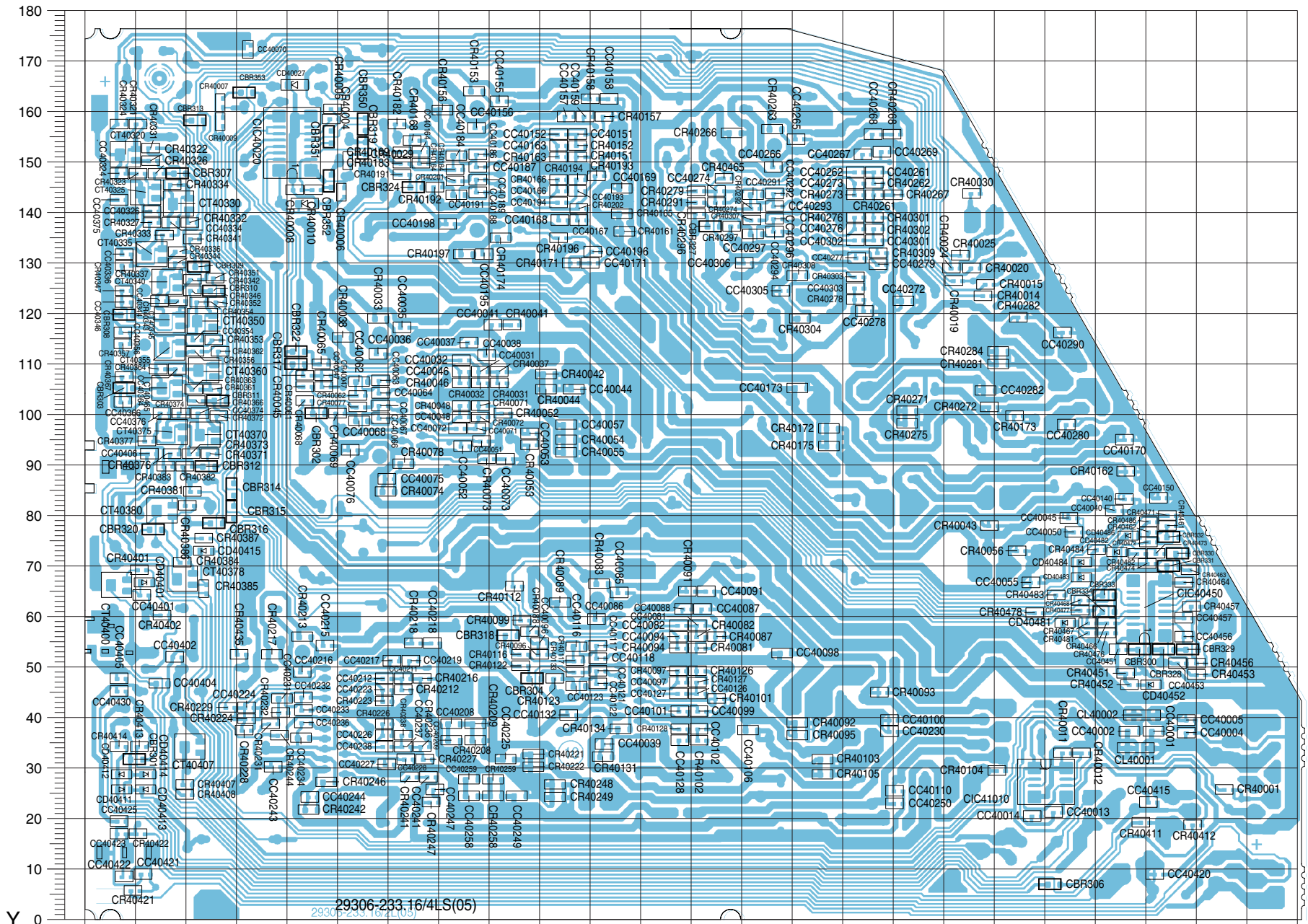
# D-Verstärker / D-Amplifier 295042041600

**Koordinaten für die Bauteile der Bestückungsseite (Oberseite)**
**Coordinates of the Components on the Components Side (Top Side)**

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| AN10 | 0 | 176 |
| AN11 | 0 | 0 |
| AN12 | 14 | 167 |
| AN13 | 256 | 0 |
| AN14 | 256 | 176 |
| AN15 | 241 | 167 |
| BR100 | 51 | 101 |
| BR101 | 117 | 158 |
| BR102 | 167 | 115 |
| BR103 | 31 | 156 |
| BR104 | 94 | 49 |
| BR105 | 21 | 155 |
| BR106 | 98 | 74 |
| BR107 | 109 | 25 |
| BR108 | 35 | 39 |
| BR109 | 63 | 19 |
| BR110 | 35 | 168 |
| BR111 | 84 | 105 |
| BR112 | 38 | 138 |
| BR113 | 42 | 130 |
| BR114 | 70 | 146 |
| BR115 | 128 | 139 |
| BR116 | 69 | 69 |
| BR117 | 42 | 147 |
| BR118 | 116 | 91 |
| BR119 | 104 | 117 |
| BR120 | 108 | 86 |
| BR121 | 146 | 96 |
| BR122 | 74 | 83 |
| BR123 | 131 | 110 |
| BR124 | 52 | 162 |
| BR125 | 137 | 22 |
| BR126 | 50 | 158 |
| BR127 | 123 | 141 |
| BR128 | 119 | 94 |
| BR129 | 46 | 75 |
| BR130 | 119 | 164 |
| BR131 | 67 | 41 |
| BR132 | 88 | 53 |
| BR133 | 195 | 48 |
| BR134 | 189 | 46 |
| BR135 | 192 | 49 |
| BR136 | 145 | 28 |
| BR137 | 166 | 38 |
| BR138 | 45 | 106 |
| BR139 | 42 | 108 |
| BR140 | 82 | 69 |
| BR141 | 64 | 150 |
| BR142 | 115 | 160 |
| BR143 | 118 | 121 |
| BR144 | 133 | 108 |
| BR145 | 201 | 62 |
| BR146 | 110 | 85 |
| BR147 | 139 | 71 |
| BR148 | 107 | 133 |
| BR149 | 16 | 45 |
| BR150 | 56 | 32 |
| BR151 | 71 | 95 |
| BR152 | 114 | 61 |
| BR153 | 114 | 42 |
| BR154 | 71 | 113 |
| BR155 | 150 | 25 |
| BR156 | 156 | 28 |
| BR157 | 56 | 50 |
| BR158 | 30 | 16 |
| BR159 | 90 | 140 |
| BR160 | 73 | 64 |
| BR161 | 109 | 129 |
| BR162 | 90 | 158 |
| BR163 | 58 | 151 |
| BR164 | 61 | 149 |
| BR165 | 149 | 150 |
| BR166 | 164 | 110 |
| BR167 | 120 | 142 |
| BR168 | 58 | 68 |
| BR169 | 31 | 40 |
| BR170 | 191 | 92 |
| BR171 | 43 | 65 |
| BR172 | 142 | 120 |
| BR173 | 134 | 68 |
| BR174 | 149 | 53 |
| BR175 | 35 | 55 |
| BR176 | 28 | 87 |
| BR177 | 93 | 120 |
| BR178 | 187 | 96 |
| BR179 | 117 | 145 |
| BR180 | 146 | 163 |
| BR181 | 152 | 75 |
| BR182 | 160 | 87 |
| BR183 | 158 | 118 |
| BR184 | 135 | 40 |
| BR301 | 219 | 45 |
| BR302 | 149 | 132 |
| BR303 | 92 | 149 |
| BR304 | 73 | 104 |
| BR305 | 116 | 52 |
| BR306 | 58 | 41 |
| BR307 | 15 | 50 |
| BR308 | 15 | 62 |
| BR309 | 21 | 56 |
| BR40014 | 58 | 169 |
| BR40095 | 142 | 42 |
| BR40105 | 152 | 36 |
| BR40165 | 150 | 90 |
| BR40275 | 162 | 96 |
| BR40285 | 190 | 106 |
| BU-CINCH | 2 | 118 |
| BU-DA | 1 | 90 |
| BU-DI | 8 | 56 |
| BU01 | 5 | 13 |
| C40003 | 181 | 51 |
| C40016 | 195 | 37 |
| C40023 | 48 | 139 |
| C40028 | 43 | 168 |
| C40029 | 50 | 79 |
| C40030 | 54 | 75 |
| C40033 | 78 | 121 |
| C40034 | 47 | 122 |
| C40042 | 101 | 101 |
| C40043 | 126 | 93 |
| C40054 | 91 | 100 |
| C40056 | 179 | 68 |
| C40061 | 50 | 113 |
| C40074 | 80 | 89 |
| C40077 | 45 | 89 |
| C40083 | 121 | 70 |
| C40084 | 90 | 69 |
| C40092 | 141 | 50 |
| C40093 | 156 | 49 |
| C40103 | 139 | 33 |
| C40104 | 159 | 20 |
| C40113 | 93 | 60 |
| C40131 | 129 | 28 |
| C40133 | 90 | 37 |
| C40153 | 98 | 166 |
| C40154 | 66 | 166 |
| C40161 | 159 | 80 |
| C40162 | 103 | 140 |
| C40172 | 142 | 102 |
| C40173 | 179 | 83 |
| C40182 | 69 | 157 |
| C40197 | 97 | 127 |
| C40201 | 57 | 135 |
| C40213 | 63 | 58 |
| C40214 | 34 | 62 |
| C40221 | 76 | 33 |
| C40222 | 100 | 23 |
| C40240 | 117 | 21 |
| C40242 | 63 | 25 |
| C40244 | 31 | 26 |
| C40248 | 89 | 24 |
| C40261 | 13 | 172 |
| C40263 | 158 | 159 |
| C40264 | 127 | 160 |
| C40271 | 161 | 125 |
| C40272 | 179 | 97 |
| C40281 | 178 | 107 |
| C40282 | 179 | 117 |
| C40304 | 139 | 114 |
| C40307 | 125 | 127 |
| C40321 | 10 | 155 |
| C40331 | 20 | 151 |
| C40341 | 7 | 164 |
| C40351 | 15 | 161 |
| C40371 | 19 | 168 |
| C40381 | 18 | 87 |
| C40382 | 19 | 76 |
| C40386 | 10 | 78 |
| C40403 | 17 | 40 |
| C40435 | 33 | 50 |
| C40452 | 210 | 51 |
| C40465 | 127 | 152 |
| D40383 | 24 | 76 |
| IC40030 | 62 | 104 |
| IC40080 | 105 | 51 |
| IC40150 | 81 | 149 |
| IC40210 | 47 | 41 |
| IC40260 | 140 | 141 |
| L40041 | 93 | 111 |
| L40054 | 95 | 90 |
| L40092 | 131 | 59 |
| L40095 | 141 | 42 |
| L40102 | 126 | 43 |
| L40105 | 154 | 36 |
| L40158 | 104 | 153 |
| L40165 | 149 | 90 |
| L40168 | 122 | 110 |
| L40218 | 76 | 44 |
| L40247 | 77 | 21 |
| L40265 | 163 | 96 |
| L40271 | 161 | 145 |
| L40278 | 155 | 109 |
| L40285 | 188 | 106 |
| L40401 | 20 | 22 |
| R40021 | 34 | 142 |
| R40026 | 42 | 162 |
| R40051 | 33 | 127 |
| R40098 | 78 | 66 |
| R40167 | 55 | 156 |
| R40247 | 33 | 76 |
| R40283 | 109 | 111 |
| ST-CI | 213 | 89 |
| ST-DV01 | 186 | 134 |
| ST-DV02 | 230 | 59 |
| ST-DV03 | 200 | 22 |
| ST-DV04 | 179 | 15 |
| ST-G_IN01 | 225 | 35 |
| ST-H01 | 239 | 8 |
| ST-H02 | 225 | 10 |
| ST-I2C_5V | 2216 | 22 |
| ST-LS01 | 179 | 36 |
| ST-LS02 | 205 | 102 |
| ST-LS03 | 197 | 116 |
| ST-LSL | 199 | 83 |
| ST-LSR | 190 | 74 |
| ST-M01 | 207 | 10 |
| ST-TT01 | 239 | 29 |
| ST-WT | 4 | 39 |

# D-Verstärker / D-Amplifier 29504204160 0

## Lötseite, Ansicht von unten / Solder Side, Bottom View



# D-Verstärker / D-Amplifier 295042041600

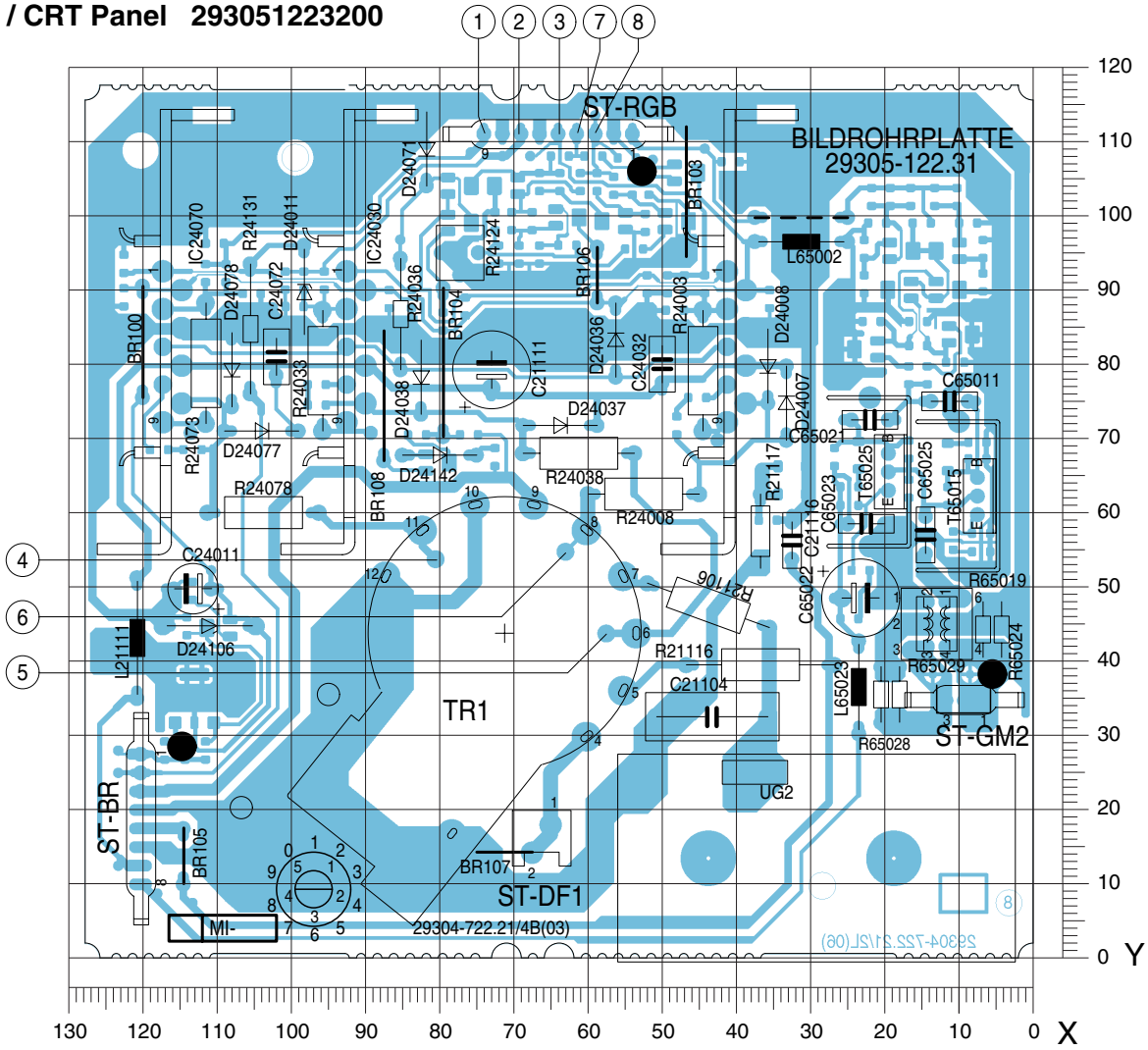
**Koordinaten für die Bauteile der Lötseite (Unterseite)**
**Coordinates of the components on the Solder Side (Bottom Side)**

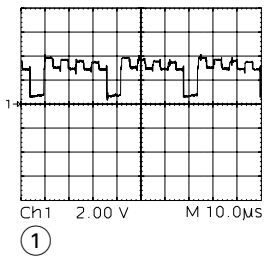
| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CBR300 | 209 | 53 |
| CBR301 | 10 | 32 |
| CBR302 | 46 | 100 |
| CBR303 | 8 | 105 |
| CBR304 | 89 | 48 |
| CBR306 | 191 | 7 |
| CBR307 | 18 | 148 |
| CBR308 | 8 | 120 |
| CBR309 | 23 | 129 |
| CBR310 | 25 | 125 |
| CBR311 | 26 | 103 |
| CBR312 | 24 | 90 |
| CBR313 | 22 | 158 |
| CBR314 | 29 | 85 |
| CBR315 | 29 | 81 |
| CBR316 | 25 | 78 |
| CBR317 | 42 | 110 |
| CBR318 | 84 | 56 |
| CBR319 | 55 | 153 |
| CBR320 | 14 | 77 |
| CBR322 | 42 | 113 |
| CBR324 | 65 | 145 |
| CBR327 | 124 | 137 |
| CBR328 | 213 | 53 |
| CBR329 | 218 | 53 |
| CBR330 | 216 | 73 |
| CBR331 | 215 | 70 |
| CBR332 | 215 | 76 |
| CBR333 | 202 | 64 |
| CBR334 | 202 | 61 |
| CBR350 | 55 | 158 |
| CBR351 | 48 | 155 |
| CBR352 | 48 | 146 |
| CBR353 | 32 | 164 |
| CC40001 | 212 | 37 |
| CC40002 | 207 | 37 |
| CC40004 | 218 | 37 |
| CC40005 | 218 | 40 |
| CC40013 | 192 | 21 |
| CC40014 | 188 | 20 |
| CC40031 | 78 | 108 |
| CC40032 | 74 | 111 |
| CC40035 | 63 | 117 |
| CC40036 | 58 | 112 |
| CC40037 | 76 | 114 |
| CC40038 | 80 | 112 |
| CC40039 | 103 | 35 |
| CC40040 | 204 | 81 |
| CC40041 | 81 | 118 |
| CC40044 | 97 | 105 |
| CC40045 | 195 | 80 |
| CC40046 | 74 | 108 |
| CC40047 | 47 | 108 |
| CC40048 | 74 | 99 |
| CC40050 | 196 | 77 |
| CC40051 | 78 | 95 |
| CC40052 | 75 | 94 |
| CC40053 | 88 | 96 |
| CC40055 | 187 | 67 |
| CC40057 | 95 | 98 |
| CC40062 | 54 | 107 |
| CC40063 | 58 | 107 |
| CC40064 | 58 | 104 |
| CC40066 | 58 | 99 |
| CC40067 | 58 | 102 |
| CC40068 | 54 | 99 |
| CC40070 | 32 | 172 |
| CC40071 | 78 | 97 |
| CC40072 | 74 | 97 |
| CC40073 | 83 | 91 |
| CC40075 | 60 | 87 |
| CC40076 | 53 | 93 |
| CC40081 | 121 | 58 |
| CC40082 | 117 | 58 |
| CC40085 | 106 | 65 |
| CC40086 | 101 | 59 |
| CC40087 | 122 | 62 |
| CC40088 | 118 | 62 |
| CC40091 | 123 | 65 |
| CC40094 | 117 | 56 |
| CC40096 | 90 | 55 |
| CC40097 | 117 | 47 |
| CC40098 | 138 | 53 |
| CC40099 | 122 | 41 |
| CC40100 | 159 | 40 |
| CC40101 | 118 | 41 |
| CC40102 | 122 | 38 |
| CC40106 | 131 | 38 |
| CC40110 | 160 | 25 |
| CC40116 | 97 | 54 |
| CC40117 | 101 | 54 |
| CC40118 | 101 | 52 |
| CC40121 | 101 | 49 |
| CC40122 | 101 | 47 |
| CC40123 | 97 | 46 |
| CC40126 | 121 | 45 |
| CC40127 | 117 | 45 |
| CC40128 | 118 | 35 |
| CC40132 | 96 | 41 |
| CC40140 | 206 | 83 |
| CC40150 | 213 | 84 |
| CC40151 | 98 | 156 |
| CC40152 | 94 | 156 |
| CC40155 | 82 | 162 |
| CC40156 | 78 | 157 |
| CC40157 | 95 | 159 |
| CC40158 | 104 | 163 |
| CC40159 | 99 | 159 |
| CC40163 | 94 | 153 |
| CC40164 | 67 | 152 |
| CC40166 | 94 | 144 |
| CC40167 | 98 | 139 |
| CC40168 | 94 | 139 |
| CC40169 | 106 | 145 |
| CC40170 | 206 | 95 |
| CC40171 | 100 | 130 |
| CC40173 | 141 | 105 |
| CC40184 | 73 | 151 |
| CC40186 | 78 | 151 |
| CC40187 | 78 | 149 |
| CC40188 | 78 | 144 |
| CC40189 | 78 | 147 |
| CC40191 | 73 | 143 |
| CC40193 | 98 | 144 |
| CC40194 | 94 | 142 |
| CC40195 | 79 | 132 |
| CC40196 | 100 | 132 |
| CC40198 | 72 | 138 |
| CC40208 | 73 | 39 |
| CC40209 | 73 | 35 |
| CC40211 | 63 | 48 |
| CC40212 | 59 | 48 |
| CC40215 | 48 | 54 |
| CC40216 | 43 | 49 |
| CC40217 | 61 | 51 |
| CC40218 | 69 | 55 |
| CC40219 | 65 | 51 |
| CC40223 | 59 | 46 |
| CC40224 | 32 | 42 |
| CC40225 | 83 | 32 |
| CC40226 | 59 | 37 |
| CC40227 | 60 | 31 |
| CC40228 | 63 | 32 |
| CC40230 | 159 | 37 |
| CC40231 | 39 | 44 |
| CC40232 | 43 | 44 |
| CC40233 | 43 | 42 |
| CC40234 | 43 | 36 |
| CC40236 | 43 | 39 |
| CC40237 | 63 | 34 |
| CC40238 | 59 | 34 |
| CC40241 | 68 | 28 |
| CC40243 | 37 | 30 |
| CC40244 | 44 | 24 |
| CC40247 | 69 | 26 |
| CC40249 | 86 | 25 |
| CC40250 | 160 | 23 |
| CC40258 | 76 | 25 |
| CC40259 | 76 | 28 |
| CC40261 | 156 | 148 |
| CC40262 | 152 | 148 |
| CC40265 | 141 | 155 |
| CC40266 | 136 | 149 |
| CC40267 | 154 | 151 |
| CC40268 | 156 | 156 |
| CC40269 | 158 | 152 |
| CC40272 | 162 | 123 |
| CC40273 | 152 | 146 |
| CC40274 | 125 | 144 |
| CC40276 | 152 | 137 |
| CC40277 | 153 | 131 |
| CC40278 | 154 | 120 |
| CC40279 | 157 | 130 |
| CC40280 | 194 | 98 |
| CC40282 | 178 | 105 |
| CC40290 | 193 | 116 |
| CC40291 | 132 | 143 |
| CC40292 | 136 | 144 |
| CC40293 | 136 | 141 |
| CC40294 | 136 | 136 |
| CC40296 | 136 | 139 |
| CC40297 | 132 | 136 |
| CC40301 | 156 | 134 |
| CC40302 | 152 | 134 |
| CC40303 | 152 | 125 |
| CC40305 | 138 | 125 |
| CC40306 | 131 | 130 |
| CC40324 | 7 | 148 |
| CC40326 | 13 | 140 |
| CC40334 | 17 | 138 |
| CC40336 | 8 | 132 |
| CC40344 | 15 | 123 |
| CC40346 | 8 | 122 |
| CC40354 | 22 | 115 |
| CC40356 | 8 | 116 |
| CC40364 | 18 | 109 |
| CC40366 | 8 | 102 |
| CC40374 | 23 | 100 |
| CC40375 | 7 | 142 |
| CC40376 | 15 | 100 |
| CC40401 | 11 | 64 |
| CC40402 | 18 | 52 |
| CC40404 | 15 | 47 |
| CC40405 | 7 | 48 |
| CC40406 | 13 | 92 |
| CC40415 | 210 | 23 |
| CC40420 | 212 | 9 |
| CC40421 | 11 | 9 |
| CC40422 | 8 | 9 |
| CC40423 | 7 | 17 |
| CC40425 | 7 | 20 |
| CC40430 | 7 | 45 |
| CC40451 | 204 | 53 |
| CC40453 | 216 | 51 |
| CC40456 | 217 | 56 |
| CC40457 | 217 | 60 |
| CD40022 | 43 | 142 |
| CD40027 | 42 | 165 |
| CD40401 | 12 | 67 |
| CD40411 | 7 | 26 |
| CD40412 | 7 | 29 |
| CD40413 | 12 | 26 |
| CD40414 | 12 | 29 |
| CD40415 | 23 | 73 |
| CD40452 | 211 | 47 |
| CD40481 | 194 | 59 |
| CD40482 | 204 | 73 |
| CD40483 | 197 | 68 |
| CD40484 | 197 | 71 |
| CD40486 | 206 | 76 |
| CIC40020 | 41 | 154 |
| CIC40450 | 210 | 62 |
| CIC41010 | 190 | 27 |
| CL40001 | 208 | 34 |
| CL40002 | 209 | 41 |
| CR40001 | 226 | 26 |
| CR40004 | 49 | 158 |
| CR40005 | 49 | 160 |
| CR40006 | 51 | 144 |
| CR40007 | 27 | 162 |
| CR40008 | 42 | 144 |
| CR40009 | 27 | 158 |
| CR40010 | 45 | 144 |
| CR40011 | 193 | 33 |
| CR40012 | 197 | 33 |
| CR40014 | 178 | 124 |
| CR40015 | 178 | 126 |
| CR40019 | 172 | 126 |
| CR40020 | 175 | 129 |
| CR40024 | 172 | 129 |
| CR40025 | 173 | 132 |
| CR40029 | 52 | 150 |
| CR40030 | 175 | 144 |
| CR40031 | 82 | 106 |
| CR40032 | 78 | 106 |
| CR40033 | 58 | 119 |
| CR40037 | 82 | 108 |
| CR40038 | 51 | 115 |
| CR40041 | 84 | 118 |
| CR40042 | 91 | 108 |
| CR40043 | 179 | 78 |
| CR40044 | 91 | 105 |
| CR40045 | 43 | 108 |
| CR40046 | 74 | 106 |
| CR40047 | 47 | 106 |
| CR40048 | 74 | 102 |
| CR40052 | 83 | 100 |
| CR40053 | 88 | 94 |
| CR40054 | 95 | 95 |
| CR40055 | 95 | 93 |
| CR40056 | 184 | 73 |
| CR40061 | 43 | 106 |
| CR40062 | 54 | 104 |
| CR40065 | 47 | 110 |
| CR40068 | 43 | 103 |
| CR40069 | 50 | 100 |
| CR40071 | 78 | 102 |
| CR40072 | 78 | 99 |
| CR40073 | 80 | 91 |
| CR40074 | 59 | 85 |
| CR40077 | 54 | 101 |
| CR40078 | 63 | 90 |
| CR40081 | 121 | 54 |
| CR40082 | 121 | 56 |
| CR40083 | 102 | 67 |
| CR40087 | 125 | 56 |
| CR40088 | 88 | 57 |
| CR40089 | 94 | 63 |
| CR40091 | 119 | 65 |
| CR40092 | 141 | 39 |
| CR40093 | 157 | 45 |
| CR40094 | 117 | 54 |
| CR40095 | 141 | 37 |
| CR40096 | 90 | 53 |
| CR40097 | 117 | 49 |
| CR40099 | 86 | 59 |
| CR40101 | 125 | 44 |
| CR40102 | 122 | 35 |
| CR40103 | 146 | 32 |
| CR40104 | 181 | 30 |
| CR40105 | 146 | 29 |
| CR40112 | 85 | 66 |
| CR40116 | 86 | 53 |
| CR40117 | 97 | 51 |
| CR40122 | 86 | 50 |
| CR40123 | 93 | 48 |
| CR40126 | 121 | 49 |
| CR40127 | 121 | 47 |
| CR40128 | 118 | 38 |
| CR40131 | 102 | 32 |
| CR40133 | 97 | 49 |
| CR40134 | 106 | 38 |
| CR40151 | 98 | 151 |
| CR40152 | 98 | 153 |
| CR40153 | 77 | 164 |
| CR40156 | 71 | 160 |
| CR40157 | 103 | 159 |
| CR40158 | 100 | 163 |
| CR40161 | 107 | 136 |
| CR40162 | 206 | 89 |
| CR40163 | 94 | 151 |
| CR40164 | 67 | 150 |
| CR40165 | 106 | 140 |
| CR40166 | 94 | 147 |
| CR40168 | 65 | 154 |
| CR40169 | 63 | 152 |
| CR40171 | 96 | 130 |
| CR40172 | 147 | 97 |
| CR40173 | 184 | 100 |
| CR40174 | 82 | 135 |
| CR40175 | 147 | 94 |
| CR40182 | 62 | 158 |
| CR40183 | 63 | 150 |
| CR40184 | 73 | 149 |
| CR40191 | 63 | 148 |
| CR40192 | 69 | 145 |
| CR40193 | 101 | 147 |
| CR40194 | 98 | 147 |
| CR40196 | 94 | 135 |
| CR40197 | 75 | 132 |
| CR40201 | 73 | 146 |
| CR40202 | 98 | 141 |
| CR40208 | 77 | 35 |
| CR40209 | 77 | 39 |
| CR40212 | 63 | 46 |
| CR40213 | 43 | 56 |
| CR40216 | 67 | 48 |
| CR40217 | 37 | 53 |
| CR40218 | 65 | 55 |
| CR40221 | 89 | 33 |
| CR40222 | 89 | 30 |
| CR40223 | 59 | 43 |
| CR40224 | 32 | 40 |
| CR40226 | 59 | 39 |
| CR40227 | 67 | 32 |
| CR40228 | 32 | 38 |
| CR40229 | 28 | 42 |
| CR40231 | 37 | 39 |
| CR40232 | 39 | 41 |
| CR40236 | 67 | 34 |
| CR40238 | 63 | 37 |
| CR40241 | 64 | 28 |
| CR40242 | 44 | 22 |
| CR40244 | 38 | 37 |
| CR40246 | 48 | 27 |
| CR40247 | 69 | 23 |
| CR40248 | 93 | 27 |
| CR40249 | 93 | 24 |
| CR40258 | 81 | 25 |
| CR40259 | 81 | 28 |
| CR40261 | 156 | 143 |
| CR40262 | 156 | 146 |
| CR40263 | 136 | 157 |
| CR40266 | 128 | 156 |
| CR40267 | 160 | 143 |
| CR40268 | 160 | 156 |
| CR40271 | 163 | 101 |
| CR40272 | 179 | 101 |
| CR40273 | 152 | 143 |
| CR40274 | 125 | 142 |
| CR40275 | 163 | 98 |
| CR40276 | 152 | 139 |
| CR40278 | 152 | 123 |
| CR40279 | 121 | 144 |
| CR40281 | 181 | 110 |
| CR40282 | 185 | 119 |
| CR40284 | 181 | 113 |
| CR40291 | 121 | 142 |
| CR40292 | 132 | 141 |
| CR40296 | 121 | 140 |
| CR40297 | 128 | 137 |
| CR40301 | 156 | 139 |
| CR40302 | 156 | 137 |
| CR40303 | 152 | 127 |
| CR40304 | 142 | 119 |
| CR40307 | 132 | 139 |
| CR40308 | 141 | 127 |
| CR40309 | 157 | 132 |
| CR40321 | 10 | 158 |
| CR40322 | 13 | 150 |
| CR40323 | 10 | 148 |
| CR40324 | 7 | 158 |
| CR40326 | 14 | 148 |
| CR40327 | 13 | 138 |
| CR40331 | 13 | 153 |
| CR40332 | 21 | 138 |
| CR40333 | 16 | 135 |
| CR40334 | 17 | 145 |
| CR40336 | 18 | 132 |
| CR40337 | 8 | 130 |
| CR40341 | 21 | 135 |
| CR40342 | 21 | 127 |
| CR40343 | 19 | 123 |
| CR40344 | 18 | 130 |
| CR40346 | 21 | 125 |
| CR40347 | 8 | 125 |
| CR40351 | 26 | 127 |
| CR40352 | 26 | 122 |
| CR40353 | 25 | 115 |
| CR40354 | 23 | 122 |
| CR40356 | 22 | 113 |
| CR40357 | 8 | 114 |
| CR40361 | 25 | 105 |
| CR40362 | 27 | 113 |
| CR40363 | 22 | 105 |
| CR40364 | 15 | 109 |
| CR40366 | 22 | 103 |
| CR40367 | 8 | 108 |
| CR40371 | 25 | 92 |
| CR40372 | 27 | 100 |
| CR40373 | 21 | 92 |
| CR40374 | 19 | 100 |
| CR40376 | 17 | 92 |
| CR40377 | 12 | 95 |
| CR40381 | 21 | 85 |
| CR40382 | 20 | 90 |
| CR40383 | 16 | 90 |
| CR40384 | 19 | 71 |
| CR40385 | 23 | 65 |
| CR40386 | 20 | 82 |
| CR40387 | 23 | 76 |
| CR40401 | 11 | 69 |
| CR40402 | 15 | 60 |
| CR40407 | 20 | 27 |
| CR40408 | 20 | 25 |
| CR40411 | 209 | 19 |
| CR40412 | 219 | 19 |
| CR40413 | 11 | 34 |
| CR40414 | 7 | 34 |
| CR40421 | 10 | 6 |
| CR40422 | 10 | 17 |
| CR40435 | 30 | 53 |
| CR40451 | 206 | 49 |
| CR40452 | 207 | 47 |
| CR40453 | 220 | 48 |
| CR40456 | 220 | 51 |
| CR40457 | 219 | 62 |
| CR40461 | 214 | 78 |
| CR40462 | 210 | 77 |
| CR40463 | 219 | 69 |
| CR40464 | 217 | 67 |
| CR40465 | 126 | 147 |
| CR40466 | 202 | 59 |
| CR40467 | 199 | 59 |
| CR40468 | 197 | 63 |
| CR40471 | 214 | 80 |
| CR40472 | 210 | 75 |
| CR40473 | 212 | 73 |
| CR40474 | 210 | 71 |
| CR40476 | 202 | 57 |
| CR40477 | 197 | 61 |
| CR40478 | 188 | 61 |
| CR40481 | 199 | 57 |
| CR40482 | 208 | 73 |
| CR40483 | 192 | 64 |
| CR40484 | 200 | 73 |
| CR40486 | 210 | 79 |
| CT40320 | 8 | 151 |
| CT40325 | 12 | 144 |
| CT40330 | 19 | 142 |
| CT40335 | 13 | 132 |
| CT40340 | 16 | 126 |
| CT40345 | 17 | 119 |
| CT40350 | 23 | 118 |
| CT40355 | 17 | 113 |
| CT40360 | 23 | 109 |
| CT40370 | 24 | 96 |
| CT40375 | 17 | 97 |
| CT40378 | 19 | 68 |
| CT40380 | 15 | 81 |
| CT40400 | 6 | 66 |
| CT40407 | 21 | 34 |
| CT40465 | 16 | 105 |
| NV01 | 33 | 122 |
| NV02 | 55 | 146 |
| NV03 | 109 | 100 |
| NV04 | 77 | 71 |
| NV05 | 35 | 83 |
| NV11 | 88 | 118 |
| NV12 | 85 | 94 |
| NV13 | 110 | 163 |
| NV14 | 101 | 127 |
| NV15 | 153 | 162 |
| NV16 | 140 | 111 |
| NV17 | 128 | 68 |
| NV18 | 133 | 28 |
| NV19 | 70 | 58 |
| NV20 | 66 | 23 |
| OM01 | 231 | 15 |
| OM02 | 4 | 166 |
| OM10 | 236 | 15 |
| OM11 | 4 | 171 |

# Bildrohrplatte / CRT Panel 293051223200

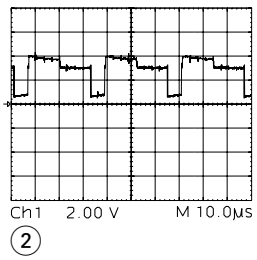
**Bestückungsseite, Ansicht von oben**

**Component Side, Top View**

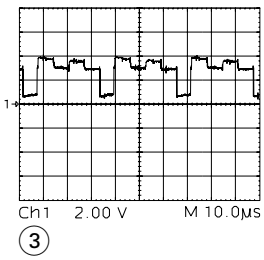


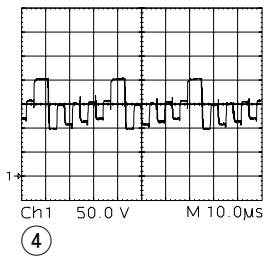
1



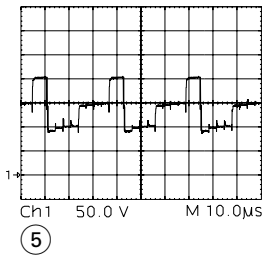
2



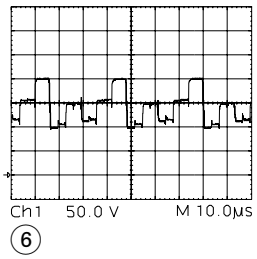
3



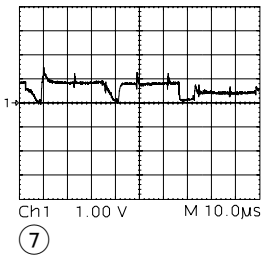
4



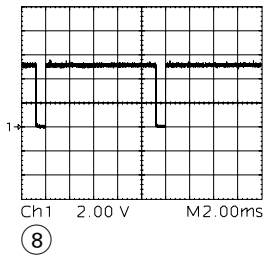
5



6



7



8

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| BR100 | 120 | 83 |
| BR103 | 47 | 103 |
| BR104 | 80 | 80 |
| BR105 | 115 | 14 |
| BR106 | 59 | 92 |
| BR107 | 71 | 14 |
| BR108 | 88 | 76 |
| BR65051 | 31 | 100 |
| C21104 | 43 | 33 |
| C21111 | 73 | 79 |
| C21116 | 33 | 56 |
| C24011 | 113 | 50 |
| C24032 | 50 | 80 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinaten X | Y |
|---|---|---|
| C24072 | 102 | 81 |
| C65011 | 11 | 75 |
| C65021 | 22 | 73 |
| C65022 | 24 | 48 |
| C65023 | 23 | 58 |
| C65025 | 15 | 57 |
| D24007 | 33 | 75 |
| D24008 | 36 | 80 |
| D24011 | 98 | 90 |
| D24036 | 56 | 83 |
| D24037 | 64 | 72 |
| D24038 | 83 | 78 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinaten X | Y |
|---|---|---|
| D24071 | 82 | 109 |
| D24077 | 104 | 71 |
| D24078 | 108 | 79 |
| D24106 | 111 | 45 |
| D24142 | 80 | 68 |
| ECO03 | 95 | 35 |
| IC24000 | 41 | 84 |
| IC24030 | 92 | 84 |
| IC24070 | 117 | 84 |
| L21111 | 121 | 43 |
| L65002 | 31 | 97 |

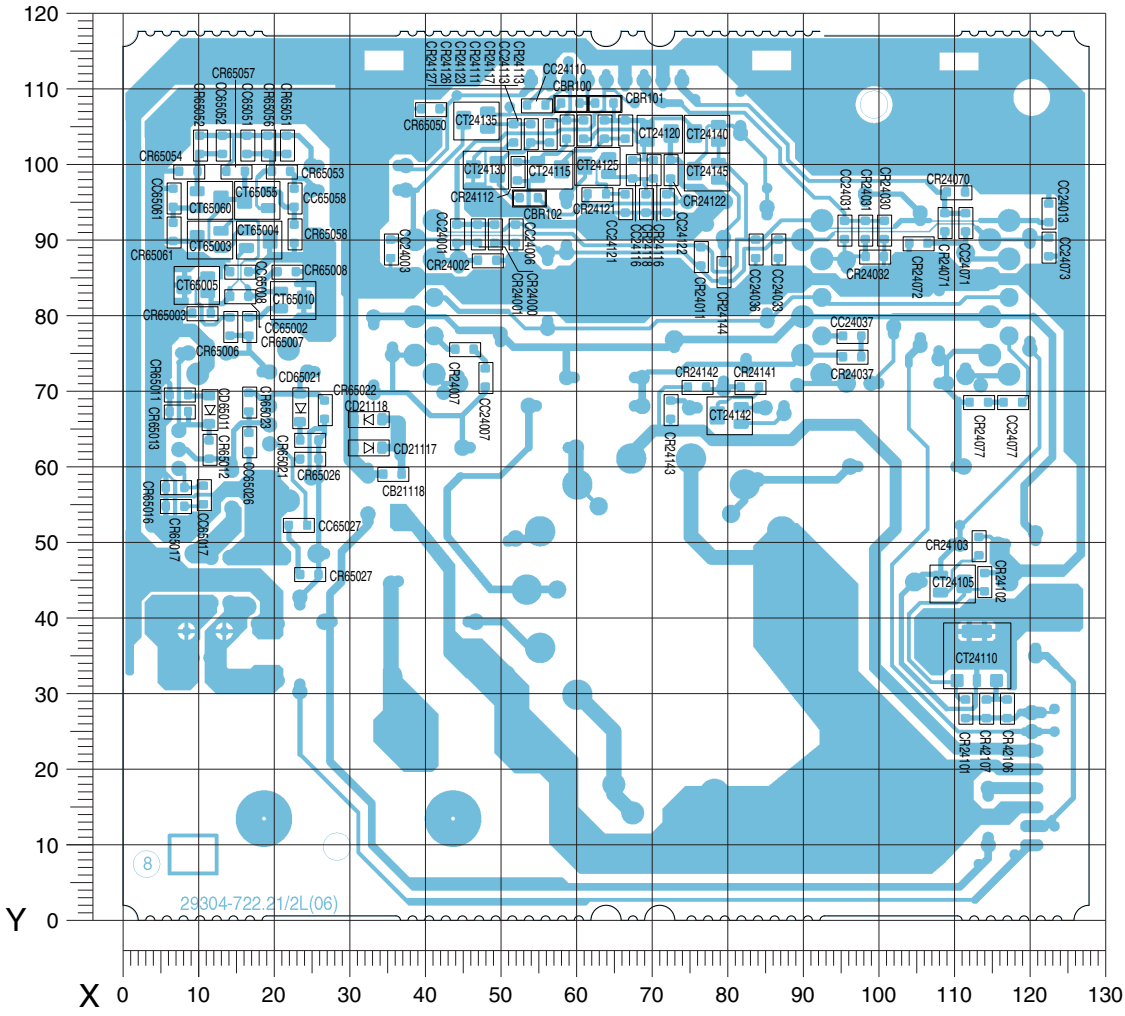
| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinaten X | Y |
|---|---|---|
| L65019 | 13 | 45 |
| L65020 | 13 | 45 |
| L65023 | 23 | 37 |
| M01 | 107 | 20 |
| R21106 | 44 | 48 |
| R21116 | 37 | 40 |
| R21117 | 37 | 58 |
| R24003 | 44 | 79 |
| R24008 | 53 | 63 |
| R24033 | 96 | 79 |
| R24036 | 85 | 87 |
| R24038 | 61 | 68 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinaten X | Y |
|---|---|---|
| R24073 | 111 | 80 |
| R24078 | 104 | 60 |
| R24124 | 77 | 95 |
| R24131 | 106 | 85 |
| R65019 | 7 | 44 |
| R65024 | 4 | 44 |
| R65028 | 20 | 35 |
| R65029 | 18 | 35 |
| RE01 | 29 | 13 |
| ST-BR | 120 | 19 |
| ST-DF01 | 66 | 16 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinaten X | Y |
|---|---|---|
| ST-GM02 | 9 | 35 |
| ST-RGB | 64 | 111 |
| T65015 | 10 | 62 |
| T65025 | 22 | 65 |
| TR01 | 77 | 33 |
| UG02 | 38 | 25 |

# Bildrohrplatte / CRT Panel 293051223200

**Lötseite, Ansicht von unten / Solder Side, Bottom View**




| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CB21118 | 36 | 59 |
| CBR100 | 59 | 108 |
| CBR101 | 64 | 108 |
| CBR102 | 54 | 96 |
| CC24001 | 44 | 91 |
| CC24003 | 35 | 89 |
| CC24006 | 52 | 91 |
| CC24007 | 48 | 72 |
| CC24013 | 123 | 94 |
| CC24031 | 96 | 91 |
| CC24033 | 87 | 89 |
| CC24036 | 84 | 89 |
| CC24037 | 97 | 77 |
| CC24071 | 111 | 92 |
| CC24073 | 123 | 89 |
| CC24077 | 118 | 69 |
| CC24110 | 55 | 108 |
| CC24113 | 64 | 105 |
| CC24116 | 68 | 99 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CC24121 | 67 | 95 |
| CC24122 | 72 | 95 |
| CC65002 | 15 | 83 |
| CC65008 | 15 | 86 |
| CC65017 | 11 | 56 |
| CC65026 | 17 | 63 |
| CC65027 | 23 | 52 |
| CC65051 | 16 | 102 |
| CC65052 | 13 | 102 |
| CC65058 | 23 | 96 |
| CC65061 | 7 | 96 |
| CD21117 | 33 | 63 |
| CD21118 | 33 | 66 |
| CD65011 | 11 | 68 |
| CD65021 | 23 | 68 |
| CR24000 | 49 | 91 |
| CR24001 | 47 | 91 |
| CR24002 | 48 | 87 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CR24007 | 45 | 76 |
| CR24011 | 77 | 88 |
| CR24030 | 101 | 91 |
| CR24031 | 98 | 91 |
| CR24032 | 99 | 88 |
| CR24037 | 97 | 74 |
| CR24070 | 110 | 96 |
| CR24071 | 109 | 92 |
| CR24072 | 105 | 90 |
| CR24077 | 113 | 69 |
| CR24101 | 111 | 28 |
| CR24102 | 114 | 45 |
| CR24103 | 113 | 49 |
| CR24111 | 59 | 105 |
| CR24112 | 52 | 99 |
| CR24113 | 67 | 105 |
| CR24116 | 70 | 99 |
| CR24117 | 61 | 105 |

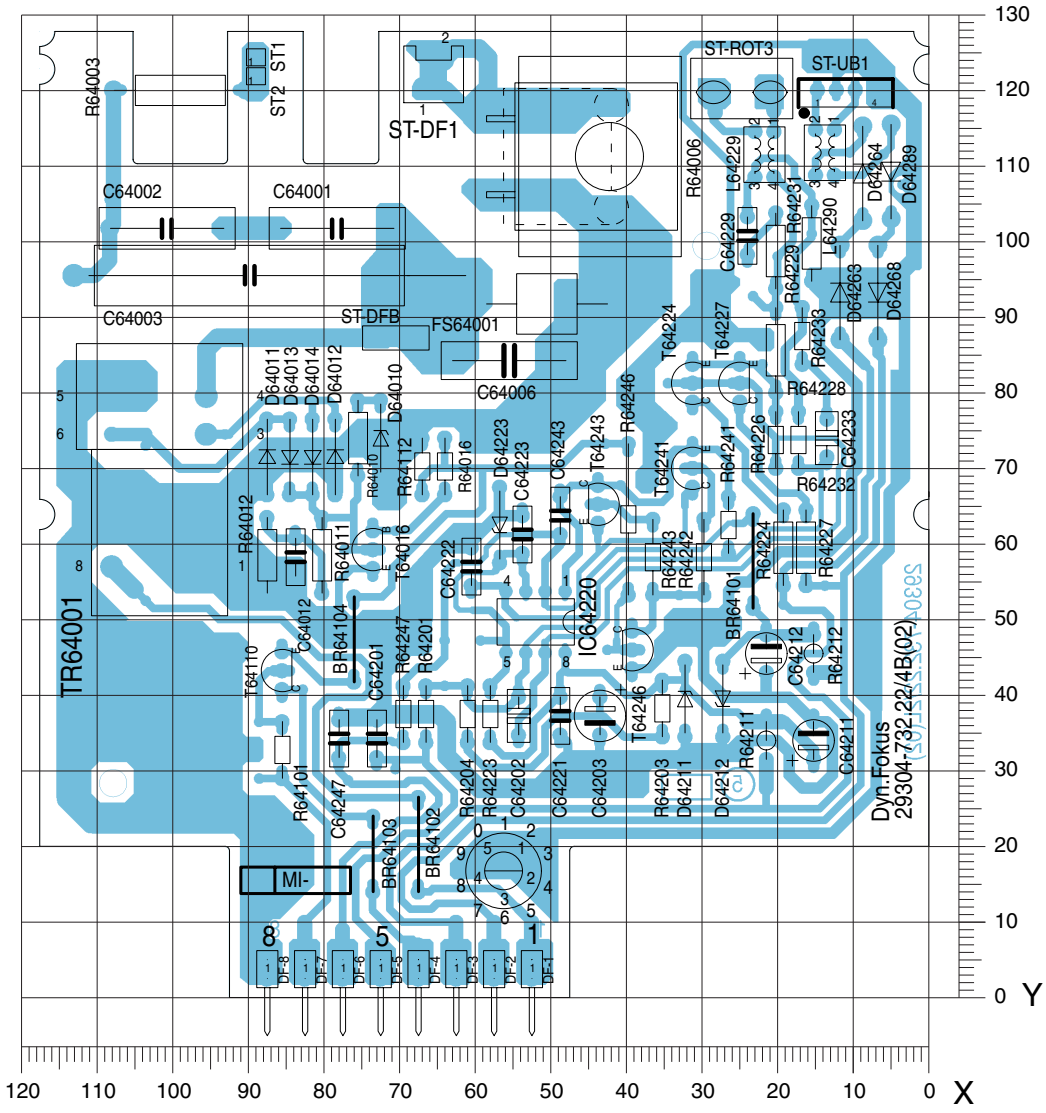
| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CR24118 | 69 | 95 |
| CR24121 | 63 | 96 |
| CR24122 | 73 | 99 |
| CR24123 | 57 | 104 |
| CR24126 | 54 | 104 |
| CR24127 | 52 | 104 |
| CR24141 | 83 | 71 |
| CR24142 | 76 | 71 |
| CR24143 | 73 | 68 |
| CR24144 | 80 | 86 |
| CR42106 | 117 | 28 |
| CR42107 | 114 | 28 |
| CR65003 | 10 | 80 |
| CR65006 | 14 | 78 |
| CR65007 | 17 | 78 |
| CR65008 | 22 | 86 |
| CR65011 | 8 | 69 |
| CR65012 | 11 | 62 |
| CR65013 | 8 | 67 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CR65016 | 7 | 57 |
| CR65017 | 7 | 55 |
| CR65021 | 25 | 63 |
| CR65022 | 27 | 68 |
| CR65023 | 17 | 69 |
| CR65026 | 25 | 61 |
| CR65027 | 25 | 46 |
| CR65050 | 41 | 107 |
| CR65051 | 22 | 102 |
| CR65052 | 10 | 102 |
| CR65053 | 21 | 99 |
| CR65054 | 9 | 99 |
| CR65056 | 19 | 102 |
| CR65057 | 15 | 99 |
| CR65058 | 23 | 91 |
| CR65061 | 7 | 91 |
| CT24105 | 110 | 44 |
| CT24110 | 113 | 35 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CT24115 | 57 | 99 |
| CT24120 | 71 | 104 |
| CT24125 | 63 | 100 |
| CT24130 | 48 | 99 |
| CT24135 | 47 | 106 |
| CT24140 | 77 | 104 |
| CT24142 | 80 | 67 |
| CT24145 | 77 | 99 |
| CT65003 | 11 | 90 |
| CT65004 | 18 | 90 |
| CT65005 | 10 | 84 |
| CT65010 | 23 | 82 |
| CT65055 | 18 | 95 |
| CT65060 | 11 | 95 |

# Fokussierungsplatte / Focusing Board 293050255100

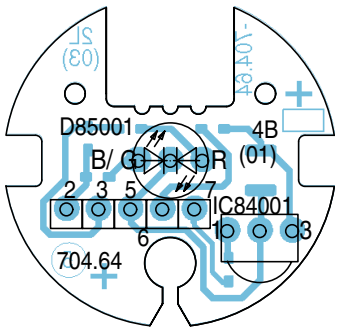
**Bestückungsseite, Ansicht von oben / Component Side, Top View**



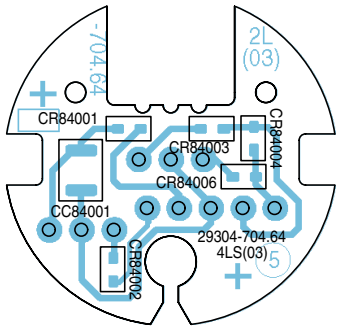

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| BR64101 | 23 | 58 |
| BR64102 | 68 | 20 |
| BR64103 | 73 | 19 |
| BR64104 | 76 | 47 |
| C64001 | 78 | 102 |
| C64002 | 101 | 102 |
| C64003 | 90 | 96 |
| C64006 | 56 | 84 |
| C64012 | 84 | 58 |
| C64201 | 73 | 34 |
| C64202 | 54 | 37 |
| C64203 | 43 | 37 |
| C64211 | 16 | 34 |
| C64212 | 22 | 46 |
| C64221 | 49 | 37 |
| C64222 | 61 | 57 |
| C64223 | 54 | 61 |
| C64229 | 24 | 101 |
| C64233 | 14 | 74 |
| C64243 | 49 | 64 |
| C64247 | 78 | 34 |
| D64010 | 73 | 74 |
| D64011 | 88 | 72 |
| D64012 | 78 | 72 |
| D64013 | 84 | 72 |
| D64014 | 81 | 72 |
| D64211 | 32 | 40 |
| D64212 | 27 | 40 |
| D64223 | 57 | 63 |
| D64263 | 12 | 93 |
| D64264 | 9 | 109 |
| D64268 | 7 | 93 |
| D64289 | 5 | 109 |
| DF-01 | 53 | 1 |
| DF-02 | 58 | 1 |
| DF-03 | 63 | 1 |
| DF-04 | 68 | 1 |
| DF-05 | 73 | 1 |
| DF-06 | 78 | 1 |
| DF-07 | 83 | 1 |
| DF-08 | 88 | 1 |
| FS64001 | 51 | 92 |
| IC64220 | 52 | 50 |
| L64229 | 22 | 111 |
| L64290 | 14 | 112 |
| R64003 | 99 | 120 |
| R64006 | 46 | 111 |
| R64010 | 76 | 74 |
| R64011 | 80 | 58 |
| R64012 | 88 | 58 |
| R64016 | 64 | 70 |
| R64101 | 86 | 33 |
| R64112 | 67 | 70 |
| R64201 | 67 | 38 |
| R64203 | 35 | 38 |
| R64204 | 61 | 38 |
| R64211 | 22 | 34 |
| R64212 | 15 | 46 |
| R64223 | 58 | 38 |
| R64224 | 19 | 59 |
| R64226 | 20 | 74 |
| R64227 | 16 | 59 |
| R64228 | 20 | 86 |
| R64229 | 20 | 99 |
| R64231 | 15 | 100 |
| R64232 | 17 | 74 |
| R64233 | 17 | 88 |
| R64241 | 27 | 63 |
| R64242 | 30 | 58 |
| R64243 | 37 | 58 |
| R64246 | 40 | 63 |
| R64247 | 69 | 38 |
| ST-DF01 | 65 | 122 |
| ST-DFB | 71 | 87 |
| ST-ROT03 | 25 | 120 |
| ST-UB01 | 11 | 120 |
| ST01 | 89 | 124 |
| ST02 | 89 | 122 |
| T64016 | 74 | 59 |
| T64110 | 86 | 43 |
| T64224 | 32 | 81 |
| T64227 | 26 | 81 |
| T64241 | 32 | 70 |
| T64243 | 43 | 65 |
| T64246 | 39 | 46 |
| TR64001 | 102 | 69 |

## LED-Platte / LED Board 293050176400

**Bestückungsseite, Ansicht von oben**
**Component Side, Top View**

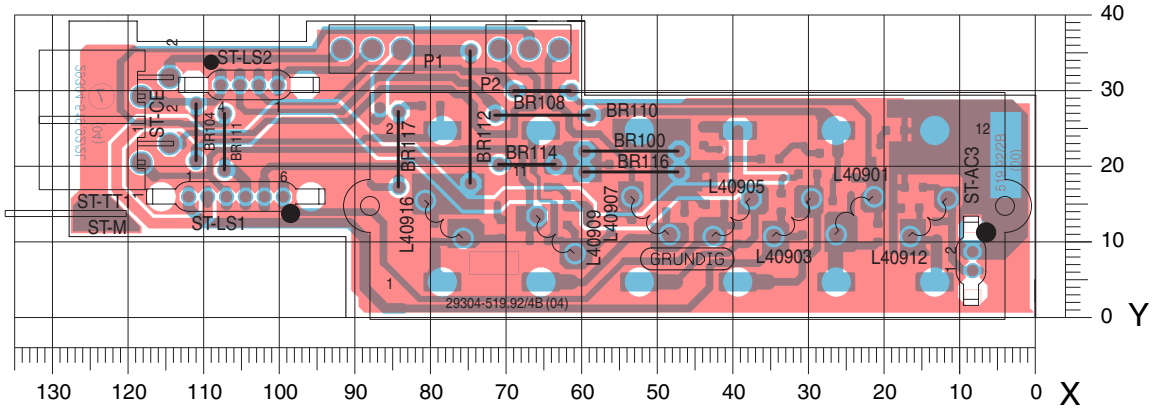



**Lötseite, Ansicht von unten**
**Solder Side, Bottom View**



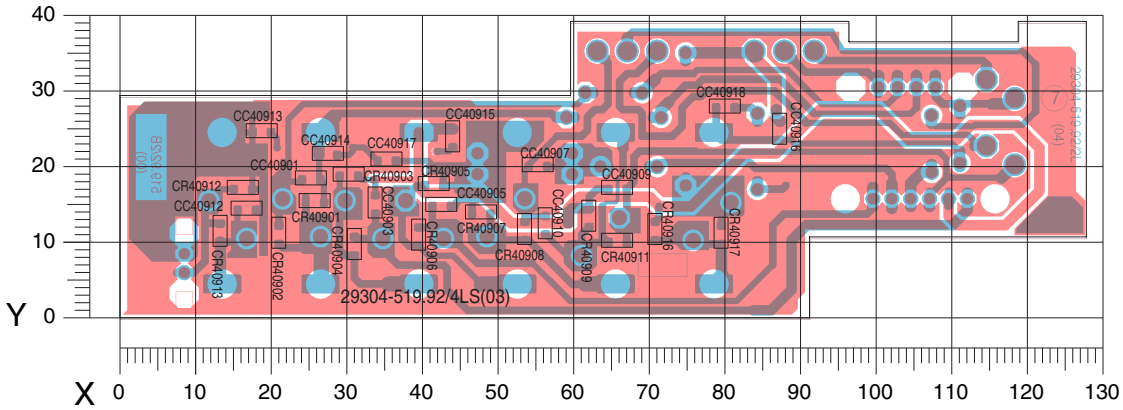

## Buchsenplatte Click-Fit / Socket Board Click-Fit 293051603900

**Bestückungsseite, Ansicht von oben / Component Side, Top View**




| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| BR100 | 53 | 22 |
| BR104 | 111 | 25 |
| BR108 | 65 | 30 |
| BR110 | 65 | 27 |
| BR111 | 107 | 23 |
| BR112 | 75 | 27 |
| BR114 | 67 | 20 |
| BR116 | 53 | 19 |
| BR117 | 84 | 22 |
| BU01 | 46 | 15 |
| L40901 | 24 | 14 |
| L40903 | 32 | 13 |
| L40905 | 40 | 13 |
| L40907 | 51 | 14 |
| L40909 | 63 | 11 |
| L40912 | 14 | 13 |
| L40916 | 78 | 13 |
| P01 | 88 | 35 |
| P02 | 67 | 35 |
| ST-AC03 | 9 | 8 |
| ST-CE | 123 | 30 |
| ST-LS01 | 106 | 16 |
| ST-LS02 | 104 | 31 |
| ST-M | 128 | 14 |
| ST-TT01 | 123 | 22 |

**Lötseite, Ansicht von unten / Solder Side, Bottom View**

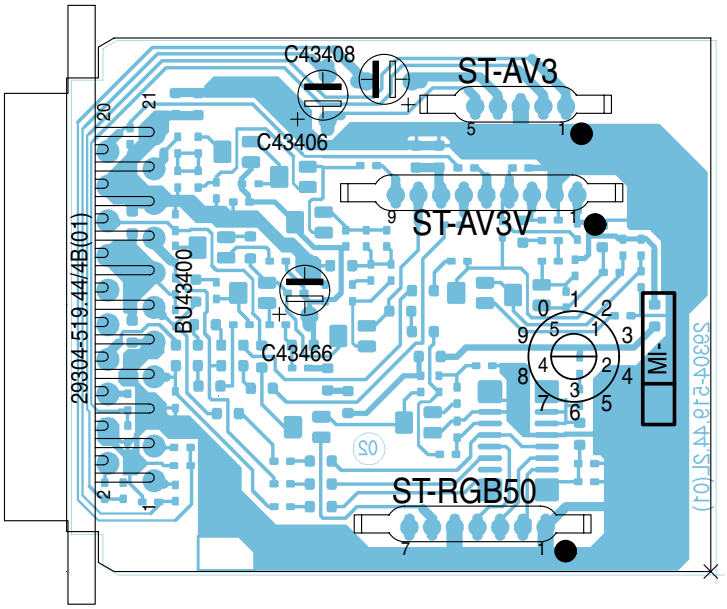



| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| BR100 | 53 | 22 |
| BR104 | 111 | 25 |
| CC40901 | 25 | 19 |
| CC40903 | 34 | 15 |
| CC40905 | 43 | 15 |
| CC40907 | 55 | 20 |
| CC40909 | 66 | 17 |
| CC40910 | 56 | 13 |
| CC40912 | 17 | 15 |
| CC40913 | 19 | 25 |
| CC40914 | 28 | 22 |
| CC40915 | 44 | 24 |
| CC40916 | 87 | 25 |
| CC40917 | 35 | 21 |
| CC40918 | 80 | 28 |
| CR40901 | 26 | 15 |
| CR40902 | 21 | 11 |
| CR40903 | 30 | 19 |
| CR40904 | 31 | 10 |
| CR40905 | 42 | 18 |
| CR40906 | 40 | 11 |
| CR40907 | 48 | 14 |
| CR40908 | 53 | 12 |
| CR40909 | 62 | 14 |
| CR40911 | 66 | 10 |
| CR40912 | 16 | 17 |
| CR40913 | 13 | 11 |
| CR40916 | 71 | 12 |
| CR40917 | 80 | 11 |
| OM30 | 4 | 5 |
| OM31 | 124 | 33 |

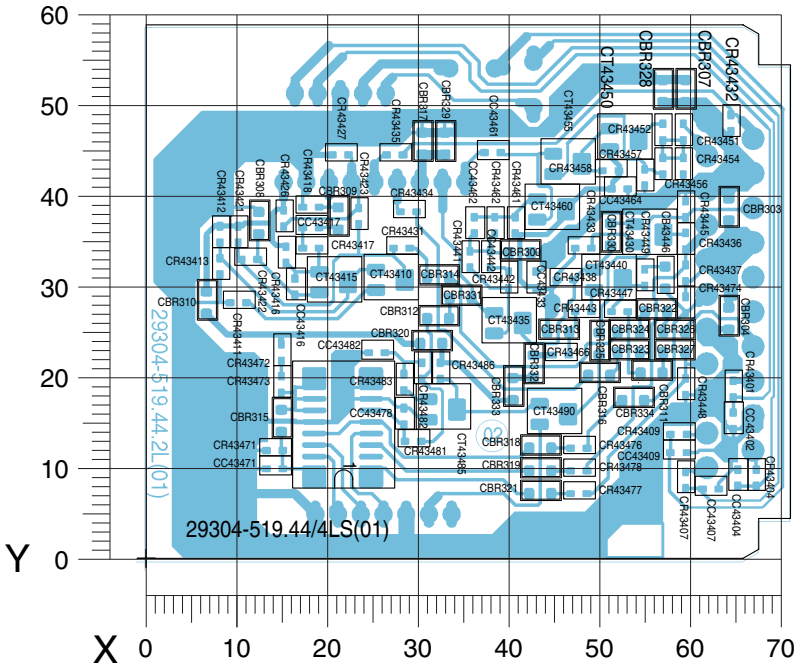
# EURO-AV-Buchsenplatte / EURO-AV Socket Board 293051604200

**Bestückungsseite, Ansicht von oben**

**Component Side, Top View**




**Lötseite, Ansicht von unten**
**Solder Side, Bottom View**




| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CB43446 | 57 | 31 |
| CBR300 | 41 | 34 |
| CBR303 | 64 | 39 |
| CBR304 | 64 | 27 |
| CBR307 | 59 | 52 |
| CBR308 | 13 | 37 |
| CBR309 | 21 | 38 |
| CBR310 | 7 | 28 |
| CBR311 | 56 | 21 |
| CBR312 | 32 | 27 |
| CBR313 | 46 | 25 |
| CBR314 | 32 | 31 |
| CBR315 | 15 | 15 |
| CBR316 | 50 | 20 |
| CBR317 | 30 | 46 |
| CBR318 | 43 | 13 |
| CBR319 | 43 | 10 |
| CBR320 | 32 | 24 |
| CBR321 | 43 | 8 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinaten X | Y |
|---|---|---|
| CBR322 | 56 | 28 |
| CBR323 | 53 | 23 |
| CBR324 | 53 | 25 |
| CBR325 | 50 | 24 |
| CBR326 | 58 | 25 |
| CBR327 | 58 | 23 |
| CBR328 | 57 | 52 |
| CBR329 | 33 | 46 |
| CBR330 | 51 | 36 |
| CBR331 | 35 | 29 |
| CBR332 | 43 | 22 |
| CBR333 | 41 | 19 |
| CBR334 | 54 | 18 |
| CC43402 | 65 | 15 |
| CC43404 | 65 | 9 |
| CC43407 | 62 | 8 |
| CC43409 | 59 | 12 |
| CC43416 | 16 | 30 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinaten X | Y |
|---|---|---|
| CC43417 | 18 | 37 |
| CC43433 | 43 | 31 |
| CC43442 | 38 | 33 |
| CC43461 | 38 | 45 |
| CC43462 | 36 | 37 |
| CC43464 | 52 | 41 |
| CC43471 | 14 | 10 |
| CC43478 | 28 | 16 |
| CC43482 | 25 | 23 |
| CIC43470 | 22 | 15 |
| CR43401 | 65 | 19 |
| CR43404 | 67 | 9 |
| CR43407 | 59 | 9 |
| CR43409 | 59 | 14 |
| CR43411 | 10 | 28 |
| CR43412 | 8 | 36 |
| CR43413 | 8 | 33 |
| CR43416 | 15 | 34 |

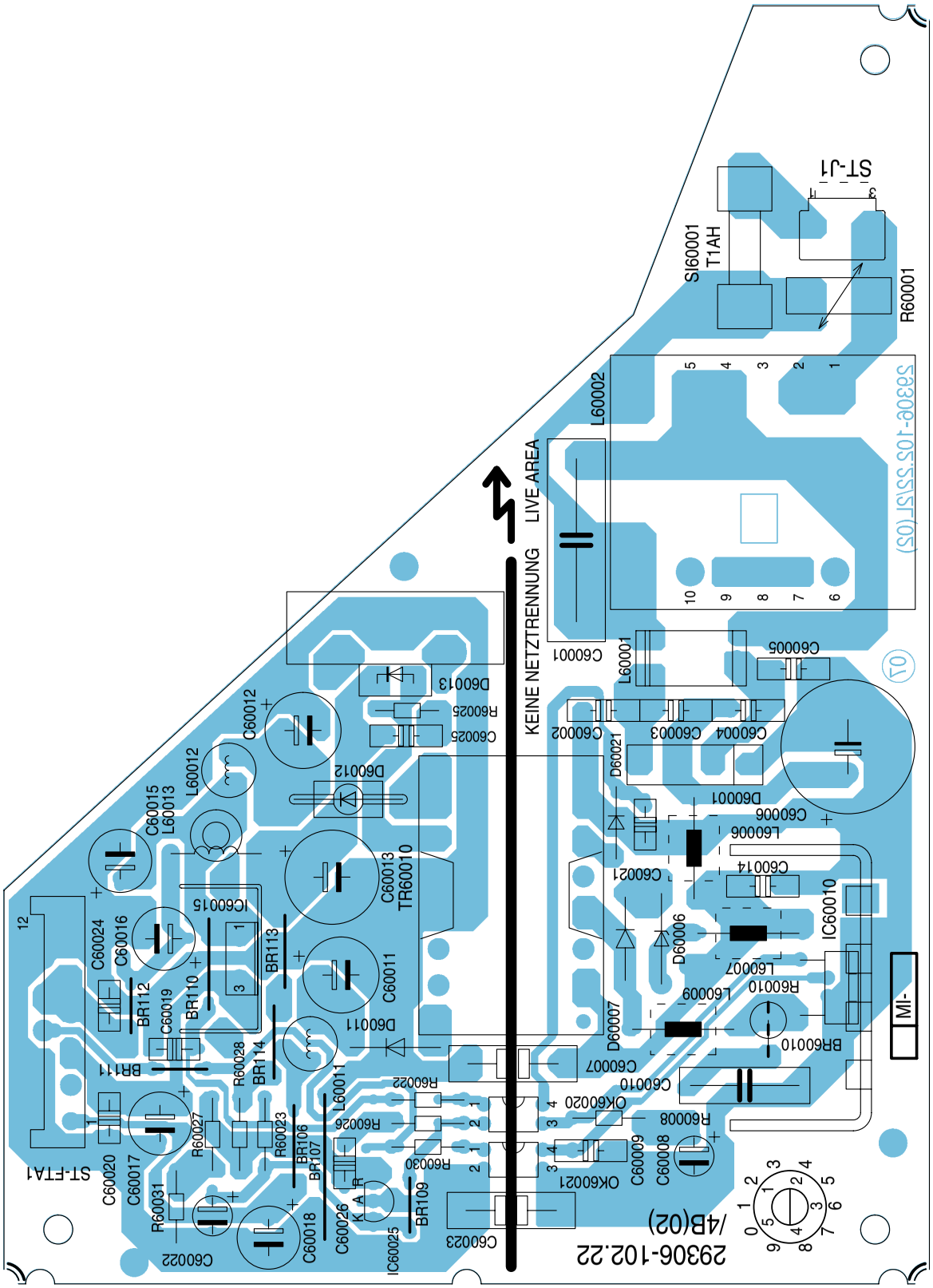
| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinaten X | Y |
|---|---|---|
| CR43417 | 18 | 35 |
| CR43418 | 18 | 39 |
| CR43421 | 10 | 36 |
| CR43422 | 11 | 33 |
| CR43423 | 23 | 38 |
| CR43426 | 15 | 38 |
| CR43427 | 22 | 45 |
| CR43431 | 28 | 35 |
| CR43432 | 65 | 48 |
| CR43433 | 48 | 35 |
| CR43434 | 29 | 38 |
| CR43435 | 28 | 45 |
| CR43436 | 59 | 35 |
| CR43437 | 59 | 32 |
| CR43438 | 46 | 31 |
| CR43441 | 36 | 33 |
| CR43442 | 40 | 31 |
| CR43443 | 48 | 28 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinaten X | Y |
|---|---|---|
| CR43445 | 59 | 39 |
| CR43447 | 52 | 28 |
| CR43448 | 59 | 19 |
| CR43449 | 55 | 31 |
| CR43451 | 59 | 47 |
| CR43452 | 57 | 47 |
| CR43454 | 59 | 43 |
| CR43456 | 57 | 43 |
| CR43457 | 55 | 42 |
| CR43458 | 51 | 43 |
| CR43461 | 41 | 37 |
| CR43462 | 38 | 37 |
| CR43466 | 46 | 23 |
| CR43471 | 14 | 12 |
| CR43472 | 15 | 23 |
| CR43473 | 15 | 20 |
| CR43474 | 59 | 28 |
| CR43476 | 48 | 13 |
| CR43477 | 48 | 8 |

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinaten X | Y |
|---|---|---|
| CR43478 | 48 | 10 |
| CR43481 | 30 | 13 |
| CR43482 | 30 | 21 |
| CR43483 | 28 | 20 |
| CR43486 | 33 | 21 |
| CT43410 | 27 | 31 |
| CT43415 | 21 | 31 |
| CT43430 | 56 | 36 |
| CT43435 | 40 | 26 |
| CT43440 | 51 | 31 |
| CT43450 | 53 | 47 |
| CT43455 | 47 | 44 |
| CT43460 | 45 | 39 |
| CT43485 | 33 | 17 |
| CT43490 | 45 | 16 |
| OM30 | 4 | 55 |
| OM31 | 63 | 3 |

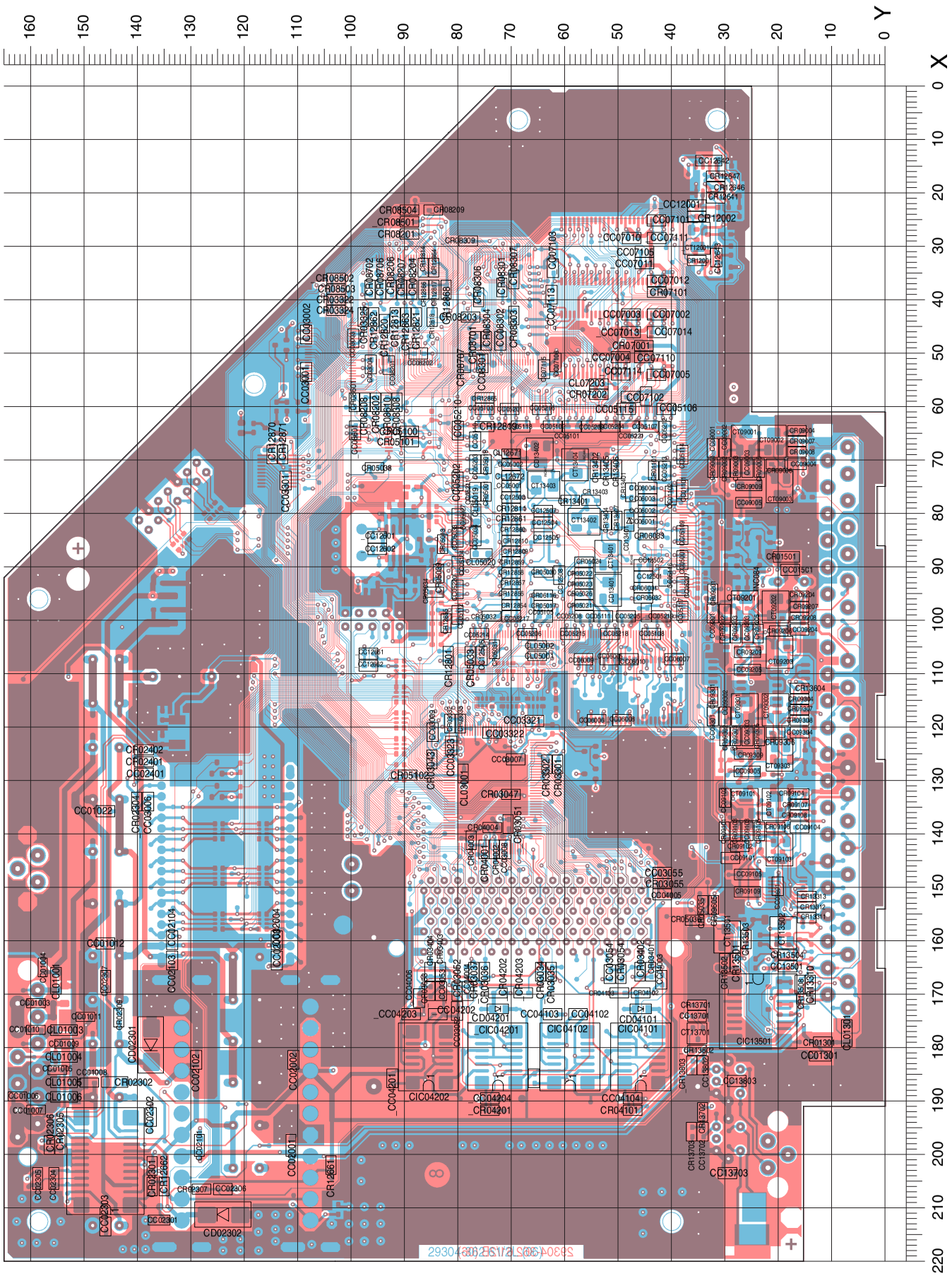
# FTA-Netzteilplatte / FTA Mains Section Board 293052022200

**Bestückungsseite, Ansicht von oben / Component Side, Top View**



# FTA-Modul / FTA Module 295041066100

**Lötseite, Ansicht von unten / Solder Side, Bottom View**



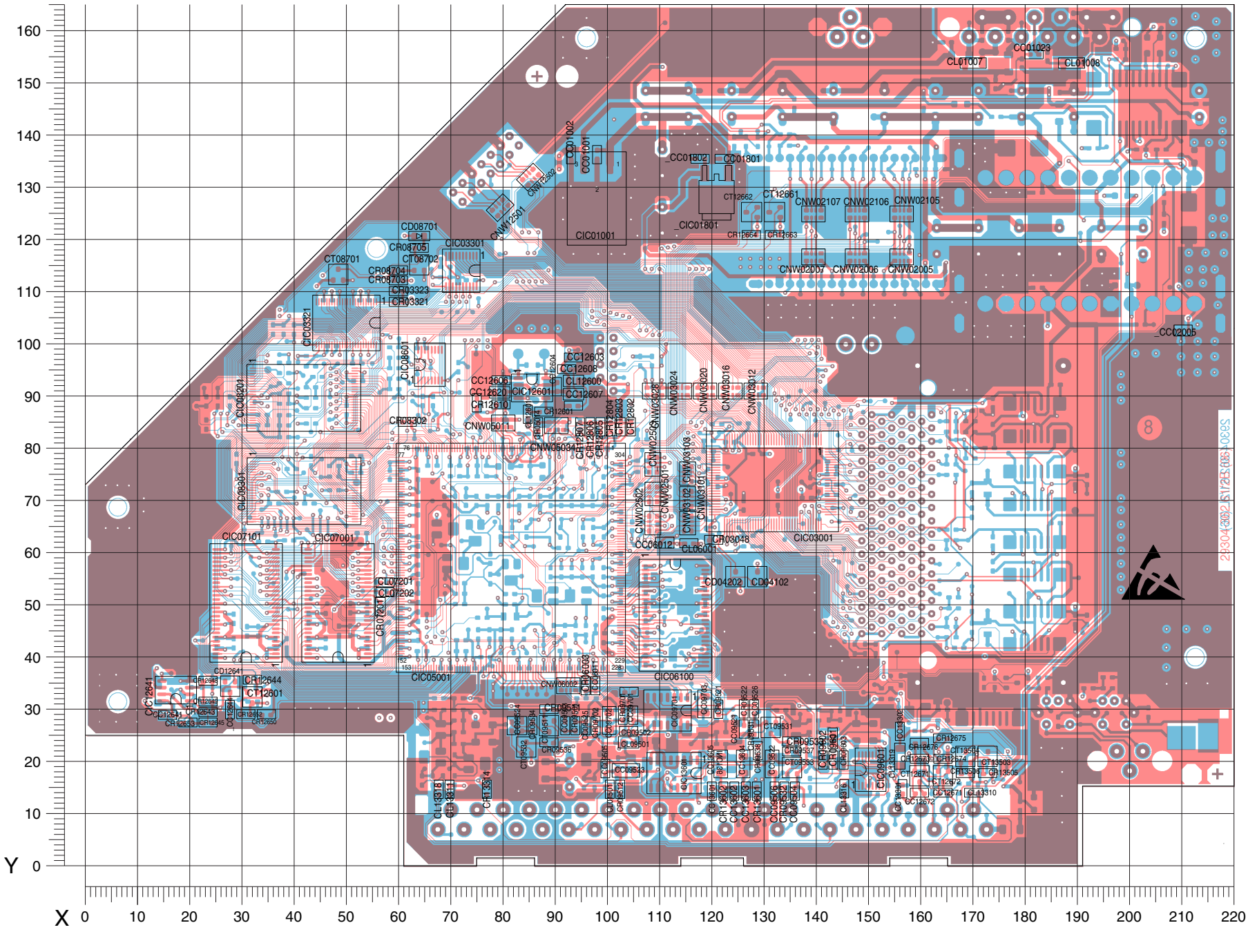
# FTA-Modul / FTA Module 295041066100

**Koordinaten für die Bauteile der Lötseite (Unterseite)**
**Coordinates of the components on the Solder Side (Bottom Side)**

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CC1003 | 172 | 159 |
| CC1004 | 165 | 158 |
| CC1005 | 184 | 155 |
| CC1006 | 189 | 162 |
| CC1007 | 192 | 159 |
| CC1008 | 187 | 149 |
| CC1009 | 179 | 154 |
| CC1010 | 177 | 159 |
| CC1011 | 174 | 150 |
| CC1012 | 161 | 146 |
| CC1022 | 136 | 146 |
| CC1101 | 76 | 38 |
| CC1102 | 77 | 40 |
| CC1301 | 182 | 12 |
| CC1501 | 91 | 18 |
| CC2001 | 198 | 111 |
| CC2002 | 182 | 111 |
| CC2003 | 164 | 114 |
| CC2004 | 160 | 114 |
| CC2101 | 198 | 128 |
| CC2102 | 182 | 129 |
| CC2103 | 164 | 133 |
| CC2104 | 160 | 133 |
| CC2301 | 212 | 136 |
| CC2302 | 193 | 138 |
| CC2303 | 213 | 146 |
| CC2304 | 205 | 156 |
| CC2305 | 205 | 159 |
| CC2306 | 206 | 124 |
| CC2307 | 168 | 146 |
| CC2401 | 129 | 139 |
| CC3001 | 53 | 108 |
| CC3002 | 46 | 108 |
| CC3003 | 47 | 100 |
| CC3004 | 52 | 96 |
| CC3006 | 134 | 138 |
| CC3007 | 126 | 69 |
| CC3008 | 143 | 71 |
| CC3009 | 121 | 85 |
| CC3052 | 173 | 80 |
| CC3054 | 166 | 52 |
| CC3301 | 74 | 112 |
| CC3321 | 119 | 66 |
| CC3322 | 121 | 74 |
| CC3323 | 123 | 81 |
| CC4003 | 167 | 42 |
| CC4004 | 169 | 78 |
| CC4101 | 186 | 66 |
| CC4102 | 174 | 58 |
| CC4103 | 174 | 62 |
| CC4104 | 190 | 47 |
| CC5001 | 89 | 38 |
| CC5027 | 81 | 80 |
| CC5033 | 85 | 80 |
| CC5034 | 84 | 77 |
| CC5101 | 64 | 59 |
| CC5102 | 64 | 62 |
| CC5103 | 60 | 75 |
| CC5104 | 90 | 80 |
| CC5105 | 99 | 64 |
| CC5106 | 60 | 41 |
| CC5107 | 64 | 44 |
| CC5108 | 103 | 44 |
| CC5109 | 84 | 38 |
| CC5110 | 67 | 77 |
| CC5111 | 99 | 53 |
| CC5112 | 99 | 80 |
| CC5113 | 64 | 68 |
| CC5114 | 69 | 38 |
| CC5115 | 60 | 48 |
| CC5116 | 92 | 41 |
| CC5117 | 98 | 38 |
| CC5201 | 60 | 70 |
| CC5202 | 74 | 80 |
| CC5203 | 71 | 77 |
| CC5204 | 64 | 51 |
| CC5205 | 99 | 48 |
| CC5206 | 103 | 67 |
| CC5207 | 94 | 38 |
| CC5208 | 99 | 56 |
| CC5209 | 64 | 55 |
| CC5210 | 64 | 80 |
| CC5211 | 76 | 77 |
| CC5212 | 64 | 41 |
| CC5213 | 72 | 41 |
| CC5214 | 103 | 76 |
| CC5215 | 103 | 59 |
| CC5216 | 60 | 64 |
| CC5217 | 99 | 70 |
| CC5218 | 103 | 52 |
| CC5219 | 99 | 42 |
| CC5220 | 94 | 80 |
| CC5221 | 64 | 48 |
| CC6001 | 82 | 44 |
| CC6002 | 80 | 44 |
| CC6003 | 77 | 44 |
| CC6004 | 75 | 44 |
| CC7012 | 36 | 43 |
| CC7110 | 51 | 45 |
| CC8201 | 52 | 93 |
| CC8202 | 50 | 87 |
| CC8301 | 52 | 75 |
| CC8302 | 48 | 72 |
| CC9001 | 68 | 32 |
| CC9003 | 71 | 26 |
| CC9004 | 71 | 16 |
| CC9005 | 78 | 25 |
| CC9101 | 144 | 29 |
| CC9103 | 139 | 26 |
| CC9104 | 139 | 16 |
| CC9105 | 148 | 26 |
| CC9201 | 99 | 32 |
| CC9203 | 103 | 26 |
| CC9204 | 102 | 16 |
| CC9205 | 109 | 26 |
| CC9301 | 118 | 32 |
| CC9303 | 122 | 26 |
| CC9304 | 121 | 16 |
| CC9305 | 128 | 26 |
| CC9601 | 150 | 20 |
| CC12501 | 92 | 45 |
| CC12502 | 90 | 45 |
| CC12503 | 77 | 70 |
| CC12504 | 82 | 64 |
| CC12505 | 85 | 64 |
| CC12506 | 107 | 76 |
| CC12507 | 80 | 64 |
| CC12508 | 92 | 61 |
| CC12642 | 14 | 33 |
| CC12643 | 32 | 32 |
| CC13501 | 165 | 18 |
| CC13701 | 174 | 35 |
| CC13702 | 196 | 34 |
| CC13703 | 204 | 30 |
| CD2301 | 179 | 138 |
| CD2302 | 211 | 124 |
| CD4101 | 173 | 46 |
| CD13401 | 94 | 52 |
| CD13402 | 69 | 65 |
| CIC2301 | 201 | 146 |
| CIC4101 | 182 | 46 |
| CIC4102 | 182 | 59 |
| CIC13501 | 173 | 24 |
| CL1001 | 167 | 155 |
| CL1003 | 177 | 154 |
| CL1004 | 182 | 154 |
| CL1005 | 187 | 154 |
| CL1006 | 189 | 154 |
| CL1301 | 177 | 7 |
| CL3001 | 129 | 79 |
| CL5001 | 107 | 65 |
| CL5002 | 105 | 65 |
| CL5019 | 80 | 77 |
| CL5020 | 88 | 76 |
| CL6002 | 99 | 45 |
| CL7203 | 56 | 54 |
| CL12671 | 69 | 70 |
| CL12672 | 73 | 70 |
| CR1101 | 72 | 43 |
| CR1301 | 179 | 12 |
| CR1501 | 88 | 18 |
| CR2301 | 206 | 137 |
| CR2302 | 186 | 144 |
| CR2305 | 198 | 155 |
| CR2306 | 198 | 157 |
| CR2307 | 206 | 128 |
| CR2308 | 202 | 137 |
| CR2309 | 174 | 143 |
| CR2401 | 126 | 139 |
| CR2402 | 124 | 139 |
| CR3032 | 119 | 81 |
| CR3033 | 119 | 80 |
| CR3035 | 166 | 63 |
| CR3036 | 166 | 75 |
| CR3043 | 126 | 85 |
| CR3047 | 133 | 70 |
| CR3052 | 169 | 80 |
| CR3054 | 166 | 49 |
| CR3301 | 127 | 61 |
| CR3302 | 127 | 63 |
| CR3322 | 40 | 103 |
| CR3324 | 42 | 103 |
| CR3325 | 43 | 98 |
| CR3402 | 166 | 46 |
| CR3403 | 166 | 83 |
| CR4001 | 143 | 75 |
| CR4003 | 141 | 78 |
| CR4101 | 192 | 47 |
| CR4102 | 170 | 46 |
| CR4103 | 170 | 50 |
| CR5001 | 76 | 75 |
| CR5013 | 86 | 83 |
| CR5017 | 97 | 64 |
| CR5018 | 71 | 75 |
| CR5021 | 97 | 56 |
| CR5022 | 91 | 56 |
| CR5023 | 93 | 56 |
| CR5024 | 89 | 56 |
| CR5026 | 95 | 56 |
| CR5030 | 91 | 64 |
| CR5031 | 105 | 73 |
| CR5032 | 99 | 74 |
| CR5033 | 107 | 78 |
| CR5034 | 95 | 84 |
| CR5035 | 153 | 34 |
| CR5036 | 156 | 36 |
| CR5038 | 71 | 96 |
| CR5100 | 65 | 89 |
| CR5101 | 67 | 89 |
| CR5102 | 129 | 89 |
| CR6031 | 94 | 45 |
| CR6033 | 84 | 44 |
| CR6116 | 95 | 64 |
| CR7001 | 49 | 45 |
| CR7101 | 39 | 43 |
| CR7202 | 58 | 54 |
| CR8201 | 28 | 89 |
| CR8202 | 59 | 95 |
| CR8203 | 43 | 78 |
| CR8204 | 38 | 89 |
| CR8206 | 38 | 93 |
| CR8207 | 38 | 91 |
| CR8301 | 38 | 72 |
| CR8303 | 43 | 69 |
| CR8304 | 48 | 75 |
| CR8306 | 40 | 76 |
| CR8307 | 36 | 69 |
| CR8503 | 38 | 103 |
| CR8504 | 23 | 89 |
| CR8702 | 38 | 96 |
| CR8706 | 38 | 94 |
| CR8707 | 52 | 79 |
| CR9001 | 71 | 32 |
| CR9002 | 71 | 30 |
| CR9003 | 71 | 28 |
| CR9004 | 64 | 16 |
| CR9005 | 71 | 23 |
| CR9006 | 71 | 20 |
| CR9007 | 67 | 16 |
| CR9008 | 69 | 16 |
| CR9009 | 75 | 25 |
| CR9101 | 139 | 30 |
| CR9102 | 142 | 27 |
| CR9103 | 139 | 28 |
| CR9104 | 132 | 16 |
| CR9105 | 139 | 23 |
| CR9106 | 139 | 20 |
| CR9107 | 134 | 16 |
| CR9108 | 136 | 16 |
| CR9109 | 151 | 26 |
| CR9201 | 95 | 32 |
| CR9202 | 103 | 30 |
| CR9203 | 103 | 28 |
| CR9204 | 95 | 16 |
| CR9205 | 103 | 24 |
| CR9206 | 102 | 20 |
| CR9207 | 97 | 16 |
| CR9208 | 100 | 16 |
| CR9209 | 106 | 26 |
| CR9301 | 114 | 32 |
| CR9302 | 122 | 30 |
| CR9303 | 122 | 28 |
| CR9304 | 115 | 16 |
| CR9305 | 122 | 23 |
| CR9306 | 121 | 20 |
| CR9307 | 117 | 16 |
| CR9308 | 119 | 16 |
| CR9309 | 125 | 26 |
| CR9605 | 153 | 32 |
| CR12641 | 21 | 32 |
| CR12647 | 17 | 32 |
| CR12661 | 202 | 104 |
| CR12662 | 206 | 135 |
| CR12801 | 107 | 82 |
| CR12817 | 38 | 84 |
| CR12819 | 64 | 75 |
| CR12854 | 97 | 70 |
| CR12856 | 95 | 70 |
| CR12857 | 93 | 70 |
| CR12858 | 91 | 70 |
| CR12859 | 89 | 70 |
| CR12861 | 81 | 70 |
| CR12862 | 43 | 96 |
| CR12863 | 43 | 90 |
| CR12864 | 34 | 84 |
| CR12865 | 58 | 75 |
| CR12866 | 38 | 86 |
| CR12868 | 38 | 82 |
| CR12870 | 69 | 115 |
| CR12871 | 69 | 113 |
| CR13310 | 168 | 14 |
| CR13311 | 156 | 15 |
| CR13312 | 154 | 15 |
| CR13313 | 152 | 15 |
| CR13401 | 78 | 59 |
| CR13402 | 72 | 54 |
| CR13403 | 78 | 55 |
| CR13404 | 81 | 52 |
| CR13405 | 72 | 52 |
| CR13406 | 72 | 50 |
| CR13501 | 164 | 28 |
| CR13503 | 160 | 26 |
| CR13504 | 163 | 18 |
| CR13507 | 171 | 15 |
| CR13508 | 168 | 16 |
| CR13604 | 113 | 16 |
| CR13701 | 172 | 35 |
| CR13702 | 192 | 34 |
| CR13703 | 196 | 36 |
| CT9001 | 67 | 26 |
| CT9002 | 67 | 21 |
| CT9003 | 75 | 20 |
| CT9101 | 134 | 26 |
| CT9102 | 134 | 20 |
| CT9103 | 143 | 20 |
| CT9201 | 97 | 26 |
| CT9202 | 97 | 20 |
| CT9203 | 106 | 20 |
| CT9301 | 117 | 26 |
| CT9302 | 117 | 20 |
| CT9303 | 125 | 20 |
| CT13401 | 88 | 52 |
| CT13402 | 82 | 56 |
| CT13403 | 75 | 64 |
| CT13404 | 71 | 58 |
| CT13501 | 159 | 30 |
| CT13502 | 158 | 19 |
| CT13701 | 177 | 35 |
| X01 | 75 | 36 |
| X02 | 61 | 32 |
| _CC3053 | 169 | 83 |
| _CC3055 | 147 | 42 |
| _CC4005 | 151 | 42 |
| _CC4006 | 171 | 87 |
| _CC4201 | 186 | 92 |
| _CC4202 | 174 | 84 |
| _CC4203 | 174 | 89 |
| _CC4204 | 190 | 74 |
| _CC5001 | 75 | 70 |
| _CC5002 | 71 | 70 |
| _CC6005 | 107 | 52 |
| _CC6006 | 119 | 54 |
| _CC6007 | 107 | 40 |
| _CC6008 | 119 | 49 |
| _CC6009 | 107 | 56 |
| _CC6010 | 107 | 48 |
| _CC7002 | 43 | 43 |
| _CC7003 | 43 | 48 |
| _CC7004 | 51 | 49 |
| _CC7005 | 54 | 43 |
| _CC7010 | 28 | 47 |
| _CC7011 | 33 | 45 |
| _CC7013 | 46 | 48 |
| _CC7014 | 46 | 43 |
| _CC7101 | 25 | 43 |
| _CC7102 | 58 | 48 |
| _CC7103 | 34 | 62 |
| _CC7105 | 31 | 45 |
| _CC7106 | 52 | 62 |
| _CC7111 | 28 | 43 |
| _CC7112 | 58 | 45 |
| _CC7113 | 39 | 62 |
| _CC7114 | 54 | 49 |
| _CC7115 | 53 | 64 |
| _CC8601 | 64 | 99 |
| _CC9002 | 68 | 30 |
| _CC9102 | 133 | 30 |
| _CC9202 | 99 | 30 |
| _CC9302 | 118 | 30 |
| _CC12001 | 22 | 35 |
| _CC12601 | 85 | 95 |
| _CC12602 | 87 | 95 |
| _CC12661 | 106 | 97 |
| _CC12662 | 109 | 97 |
| _CC13802 | 183 | 34 |
| _CC13803 | 186 | 28 |
| _CD4201 | 173 | 73 |
| _CD13401 | 81 | 48 |
| _CIC4201 | 182 | 73 |
| _CIC4202 | 182 | 86 |
| _CR2304 | 134 | 140 |
| _CR3034 | 166 | 65 |
| _CR3037 | 166 | 77 |
| _CR3051 | 138 | 71 |
| _CR3053 | 169 | 85 |
| _CR3055 | 149 | 42 |
| _CR3401 | 166 | 44 |
| _CR3404 | 166 | 85 |
| _CR4002 | 143 | 73 |
| _CR4004 | 139 | 74 |
| _CR4201 | 192 | 74 |
| _CR4202 | 170 | 73 |
| _CR4203 | 170 | 68 |
| _CR5039 | 91 | 84 |
| _CR6032 | 96 | 45 |
| _CR8208 | 59 | 97 |
| _CR8209 | 23 | 85 |
| _CR8308 | 59 | 91 |
| _CR8309 | 29 | 78 |
| _CR8501 | 25 | 89 |
| _CR8502 | 36 | 103 |
| _CR8601 | 59 | 99 |
| _CR8610 | 59 | 93 |
| _CR8701 | 48 | 77 |
| _CR12001 | 33 | 35 |
| _CR12002 | 24 | 35 |
| _CR12646 | 19 | 32 |
| _CR12809 | 87 | 70 |
| _CR12810 | 85 | 70 |
| _CR12811 | 79 | 70 |
| _CR12813 | 43 | 92 |
| _CR12814 | 34 | 86 |
| _CR12818 | 43 | 85 |
| _CR12820 | 45 | 94 |
| _CR12821 | 43 | 88 |
| _CR12855 | 101 | 82 |
| _CR12860 | 83 | 70 |
| _CR13401 | 76 | 48 |
| _CR13407 | 81 | 50 |
| _CR13502 | 164 | 30 |
| _CR13802 | 180 | 35 |
| _CR13803 | 183 | 36 |
| _CT12001 | 28 | 35 |

# FTA-Modul / FTA Module 29504106100

## Bestückungsseite, Ansicht von oben / Component Side, Top View



# FTA-Modul / FTA Module 295041066100

## Koordinaten für die Chip-Bauteile der Bestückungsseite (Oberseite)
## Coordinates of the Chip Components on the Components Side (Top Side)

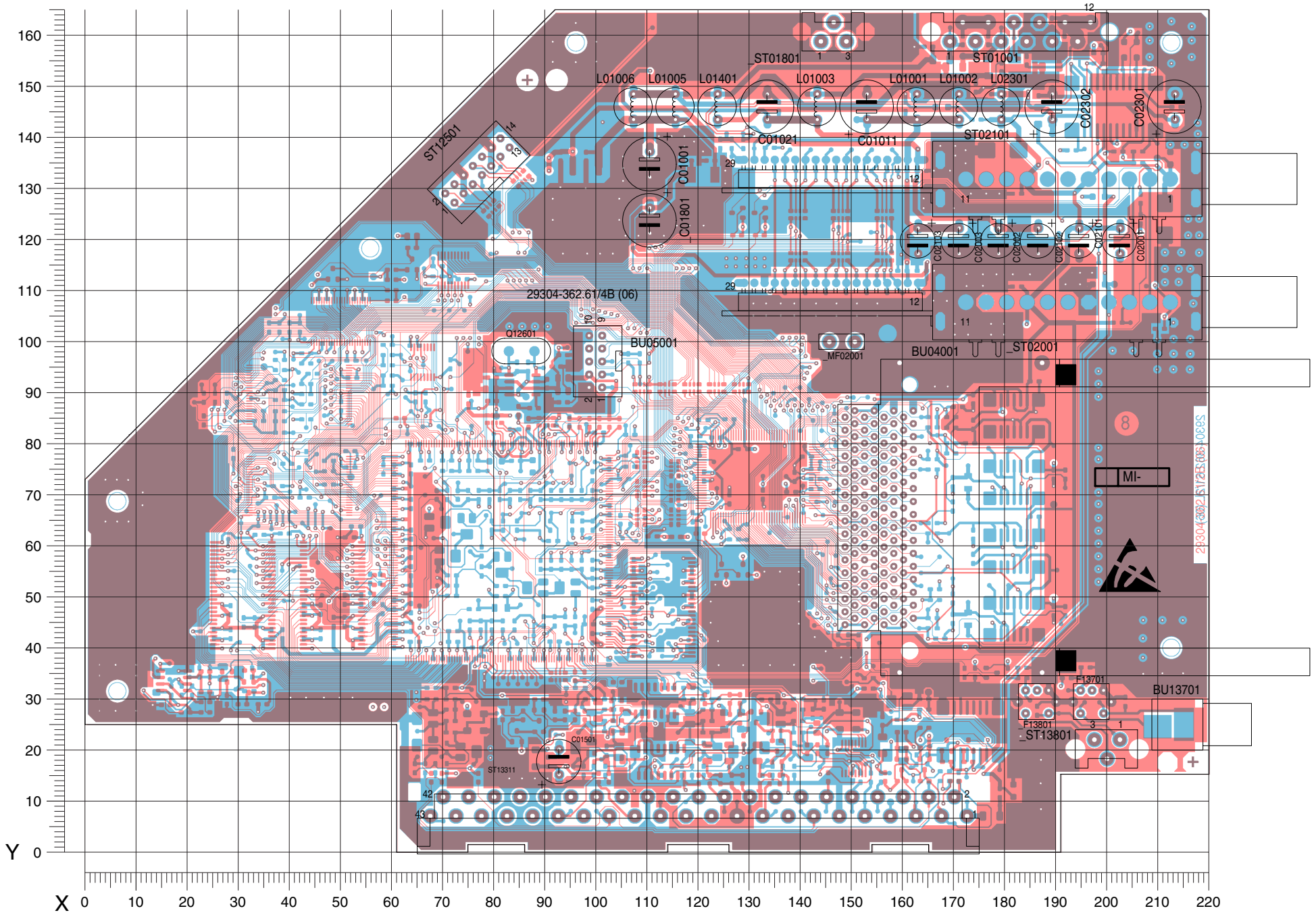
| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| CC1001 | 98 | 136 |
| CC1002 | 93 | 136 |
| CC1023 | 182 | 155 |
| CC6011 | 98 | 35 |
| CC6012 | 111 | 62 |
| CC9503 | 92 | 27 |
| CC9504 | 136 | 14 |
| CC9505 | 100 | 19 |
| CC9506 | 132 | 14 |
| CC9521 | 126 | 26 |
| CC9522 | 132 | 20 |
| CC9523 | 104 | 18 |
| CC9524 | 84 | 27 |
| CC9525 | 96 | 27 |
| CC9526 | 128 | 30 |
| CC9701 | 105 | 29 |
| CC9702 | 100 | 28 |
| CC9703 | 119 | 31 |
| CC12603 | 94 | 97 |
| CC12604 | 90 | 92 |
| CC12606 | 80 | 93 |
| CC12607 | 94 | 90 |
| CC12608 | 92 | 95 |
| CC12609 | 94 | 88 |
| CC12620 | 79 | 91 |
| CC12641 | 16 | 29 |
| CC12671 | 164 | 14 |
| CC12672 | 160 | 14 |
| CC13301 | 157 | 15 |
| CC13302 | 156 | 26 |
| CC13601 | 120 | 14 |
| CC13602 | 124 | 14 |
| CC13603 | 126 | 14 |
| CC13604 | 126 | 20 |
| CC13605 | 122 | 20 |
| CD4102 | 129 | 55 |
| CD8701 | 64 | 121 |
| CD9601 | 143 | 24 |
| CD12641 | 28 | 34 |
| CIC1001 | 98 | 128 |
| CIC3001 | 132 | 74 |
| CIC3301 | 72 | 114 |
| CIC3321 | 50 | 104 |
| CIC5001 | 81 | 59 |
| CIC6100 | 113 | 48 |
| CIC7001 | 48 | 50 |
| CIC7101 | 31 | 50 |
| CIC8301 | 42 | 72 |
| CIC9601 | 150 | 18 |
| CIC9701 | 112 | 30 |
| CIC12601 | 86 | 92 |
| CIC12641 | 17 | 34 |
| CIC13601 | 113 | 18 |
| CL1007 | 170 | 154 |
| CL1008 | 189 | 154 |
| CL1501 | 100 | 15 |
| CL6001 | 116 | 62 |
| CL7201 | 57 | 54 |
| CL7202 | 57 | 52 |
| CL9501 | 104 | 24 |
| CL12600 | 94 | 93 |
| CL12601 | 85 | 86 |
| CL13310 | 170 | 14 |
| CL13311 | 70 | 15 |
| CL13316 | 145 | 15 |
| CL13318 | 68 | 15 |
| CL13319 | 156 | 21 |
| CNW2005 | 156 | 117 |
| CNW2006 | 148 | 117 |
| CNW2007 | 139 | 117 |
| CNW2105 | 156 | 125 |
| CNW2106 | 148 | 125 |
| CNW2107 | 139 | 125 |
| CNW3012 | 128 | 91 |
| CNW3016 | 124 | 91 |
| CNW3020 | 119 | 91 |
| CNW3024 | 114 | 91 |
| CNW3028 | 109 | 91 |
| CNW3101 | 115 | 70 |
| CNW3102 | 115 | 66 |
| CNW3103 | 115 | 75 |
| CNW5011 | 80 | 85 |
| CNW5034 | 90 | 84 |
| CNW6002 | 93 | 35 |
| CNW12501 | 79 | 126 |
| CNW12502 | 85 | 132 |
| CR3321 | 60 | 108 |
| CR3323 | 60 | 110 |
| CR5014 | 87 | 84 |
| CR6003 | 96 | 35 |
| CR7201 | 56 | 50 |
| CR8302 | 62 | 85 |
| CR8703 | 60 | 112 |
| CR8704 | 60 | 114 |
| CR8705 | 64 | 118 |
| CR9501 | 94 | 27 |
| CR9502 | 104 | 26 |
| CR9511 | 89 | 30 |
| CR9512 | 102 | 15 |
| CR9521 | 121 | 30 |
| CR9522 | 126 | 30 |
| CR9531 | 128 | 26 |
| CR9532 | 134 | 14 |
| CR9533 | 135 | 24 |
| CR9534 | 86 | 27 |
| CR9535 | 82 | 27 |
| CR9536 | 89 | 24 |
| CR9537 | 135 | 22 |
| CR9538 | 129 | 22 |
| CR9601 | 143 | 20 |
| CR9602 | 141 | 20 |
| CR9603 | 145 | 20 |
| CR9701 | 103 | 29 |
| CR9703 | 104 | 33 |
| CR12601 | 88 | 87 |
| CR12602 | 75 | 89 |
| CR12610 | 80 | 88 |
| CR12643 | 23 | 29 |
| CR12644 | 32 | 36 |
| CR12645 | 23 | 27 |
| CR12648 | 23 | 35 |
| CR12650 | 35 | 29 |
| CR12652 | 31 | 29 |
| CR12653 | 20 | 27 |
| CR12663 | 132 | 121 |
| CR12664 | 128 | 121 |
| CR12673 | 160 | 20 |
| CR12674 | 164 | 20 |
| CR12675 | 164 | 24 |
| CR12676 | 160 | 24 |
| CR12802 | 104 | 84 |
| CR12803 | 103 | 84 |
| CR12805 | 99 | 84 |
| CR13314 | 77 | 15 |
| CR13505 | 173 | 18 |
| CR13506 | 169 | 18 |
| CR13601 | 129 | 14 |
| CR13602 | 122 | 14 |
| CT8701 | 48 | 113 |
| CT8702 | 64 | 115 |
| CT9511 | 89 | 27 |
| CT9531 | 131 | 27 |
| CT9532 | 84 | 23 |
| CT9533 | 135 | 19 |
| CT12601 | 32 | 32 |
| CT12661 | 132 | 125 |
| CT12662 | 128 | 125 |
| CT12671 | 160 | 17 |
| CT12672 | 164 | 17 |
| CT13503 | 173 | 21 |
| CT13504 | 169 | 21 |
| X03 | 78 | 32 |
| X13 | 203 | 37 |
| _CC1801 | 122 | 135 |
| _CC1802 | 118 | 135 |
| _CC2005 | 210 | 103 |
| _CC12644 | 28 | 30 |
| _CD4202 | 124 | 55 |
| _CIC1801 | 121 | 129 |
| _CIC8201 | 42 | 90 |
| _CIC8601 | 66 | 96 |
| _CNW2501 | 109 | 71 |
| _CNW2502 | 109 | 66 |
| _CNW2503 | 109 | 77 |
| _CR3048 | 120 | 62 |
| _CR9702 | 98 | 27 |
| _CR12649 | 23 | 31 |
| _CR12804 | 101 | 84 |
| _CR12806 | 97 | 84 |
| _CR12807 | 95 | 84 |

## Koordinaten für die Bauteile der Bestückungsseite (Oberseite)
## Coordinates of the Components on the Components Side (Top Side)

| Pos.-Nr./ Pos. No. | Koordinaten/ Coordinates X | Y |
|---|---|---|
| BU4001 | 194 | 66 |
| BU5001 | 100 | 96 |
| BU13701 | 218 | 25 |
| C1001 | 111 | 135 |
| C1011 | 153 | 146 |
| C1021 | 134 | 146 |
| C1501 | 93 | 17 |
| C2001 | 203 | 120 |
| C2002 | 179 | 120 |
| C2003 | 171 | 120 |
| C2101 | 195 | 120 |
| C2102 | 187 | 120 |
| C2103 | 163 | 120 |
| C2301 | 213 | 146 |
| C2302 | 189 | 146 |
| F13701 | 197 | 30 |
| L1001 | 163 | 146 |
| L1002 | 171 | 146 |
| L1003 | 143 | 146 |
| L1005 | 115 | 146 |
| L1006 | 107 | 146 |
| L1401 | 124 | 146 |
| L2301 | 179 | 146 |
| Q12601 | 85 | 98 |
| ST1001 | 183 | 161 |
| ST2101 | 181 | 130 |
| ST12501 | 77 | 133 |
| ST13311 | 120 | 2 |
| _C1801 | 111 | 124 |
| _F13801 | 186 | 30 |
| _MF2001 | 148 | 100 |
| _ST1801 | 146 | 161 |
| _ST2001 | 181 | 106 |
| _ST13801 | 200 | 20 |

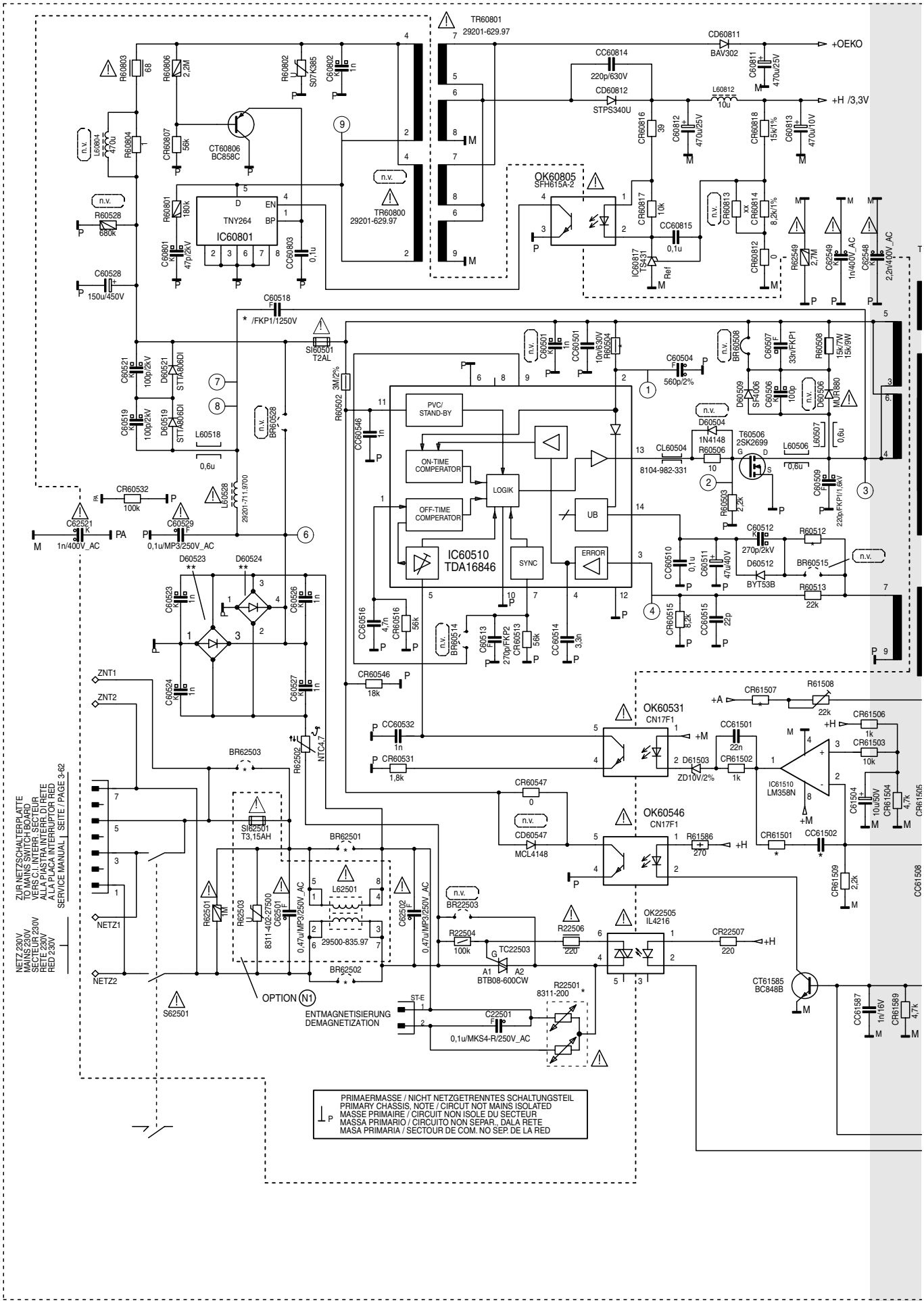
# FTA-Modul / FTA Module 29504106610 0

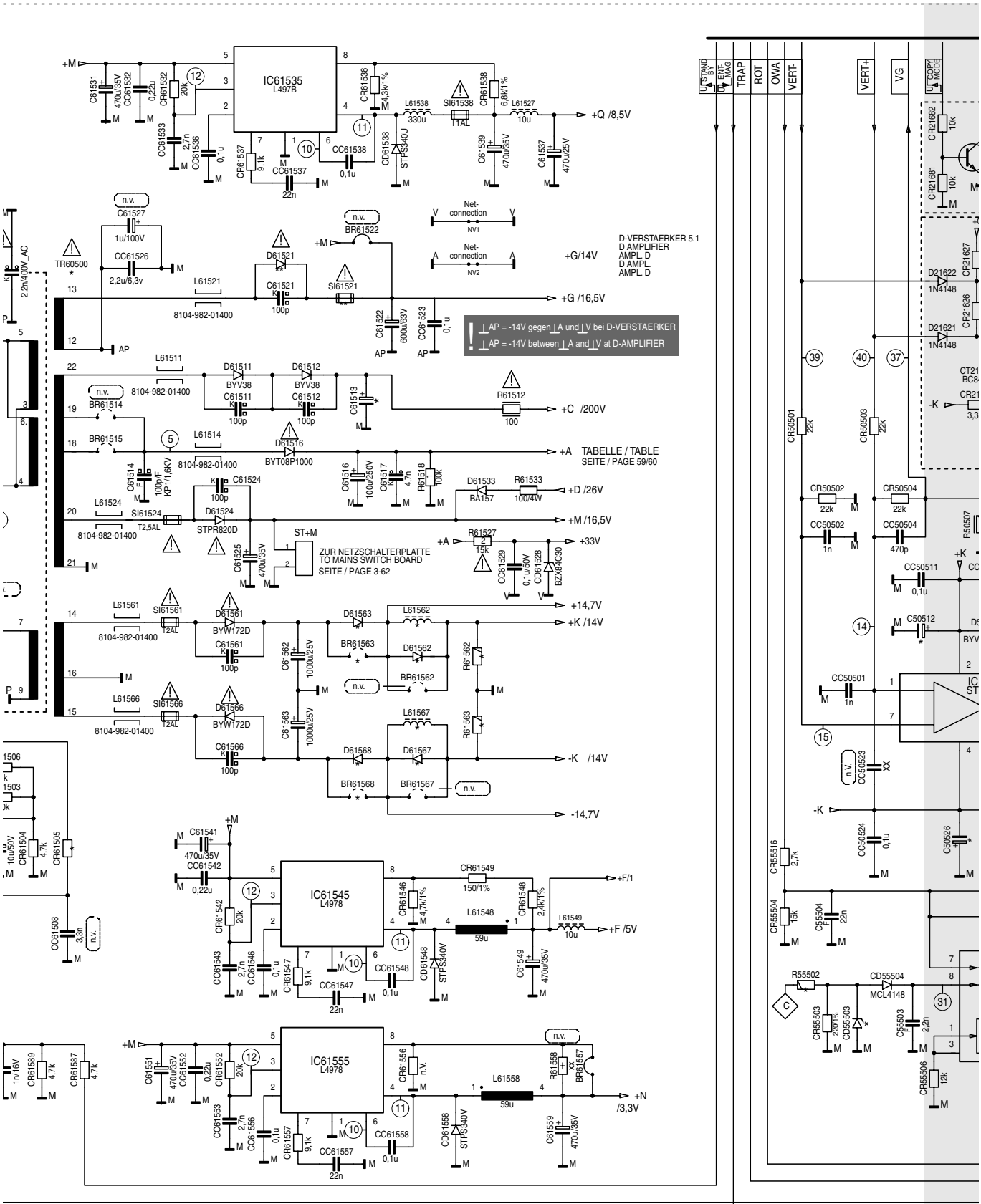
**Bestückungsseite, Ansicht von oben / Component Side, Top View**

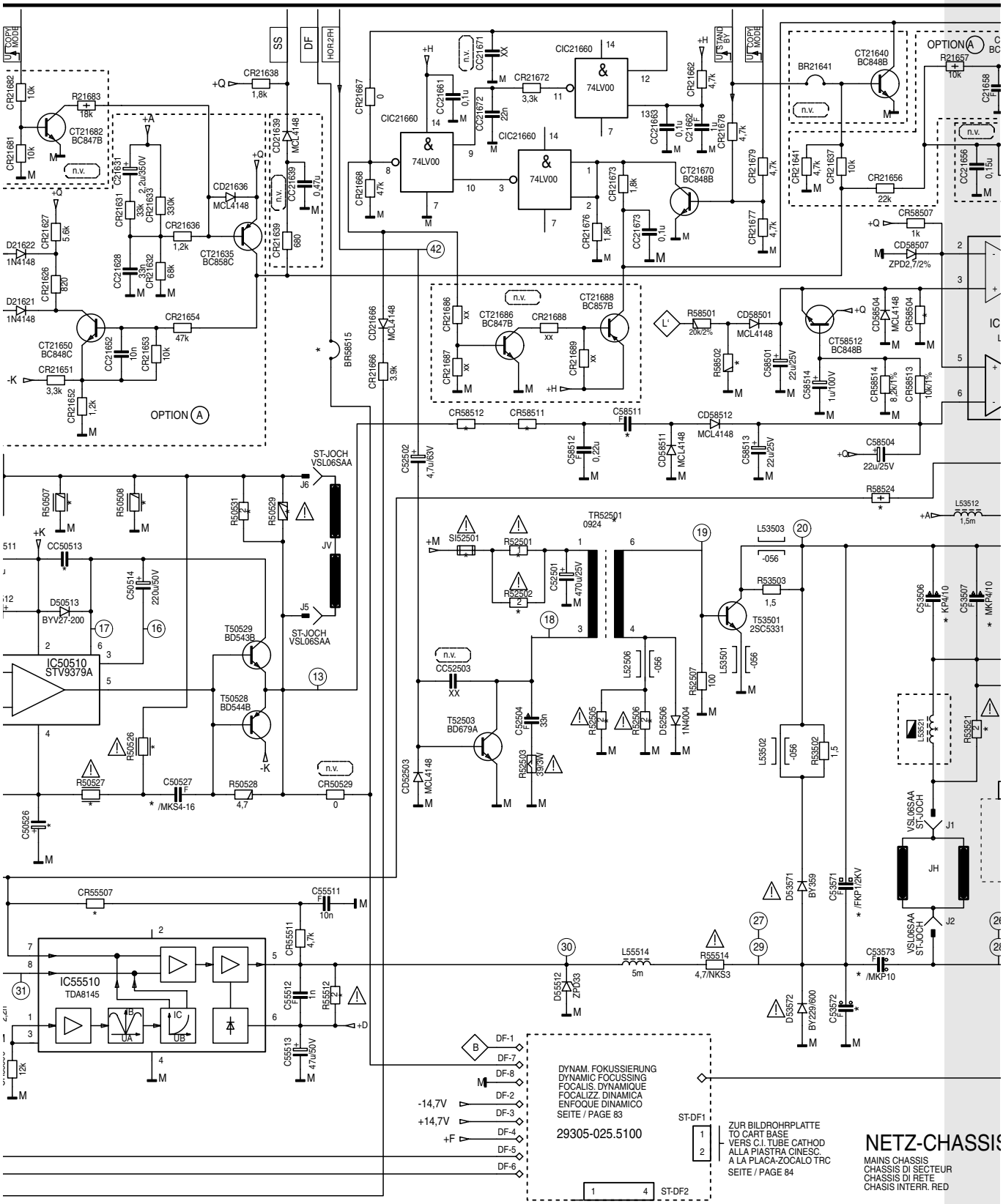


# Netz-Chassis / Mains Chassis

Oszillogramme und Platinenabbildungen siehe Seite 19…29
Oscillograms and Layout of PCBs see Page 19…29

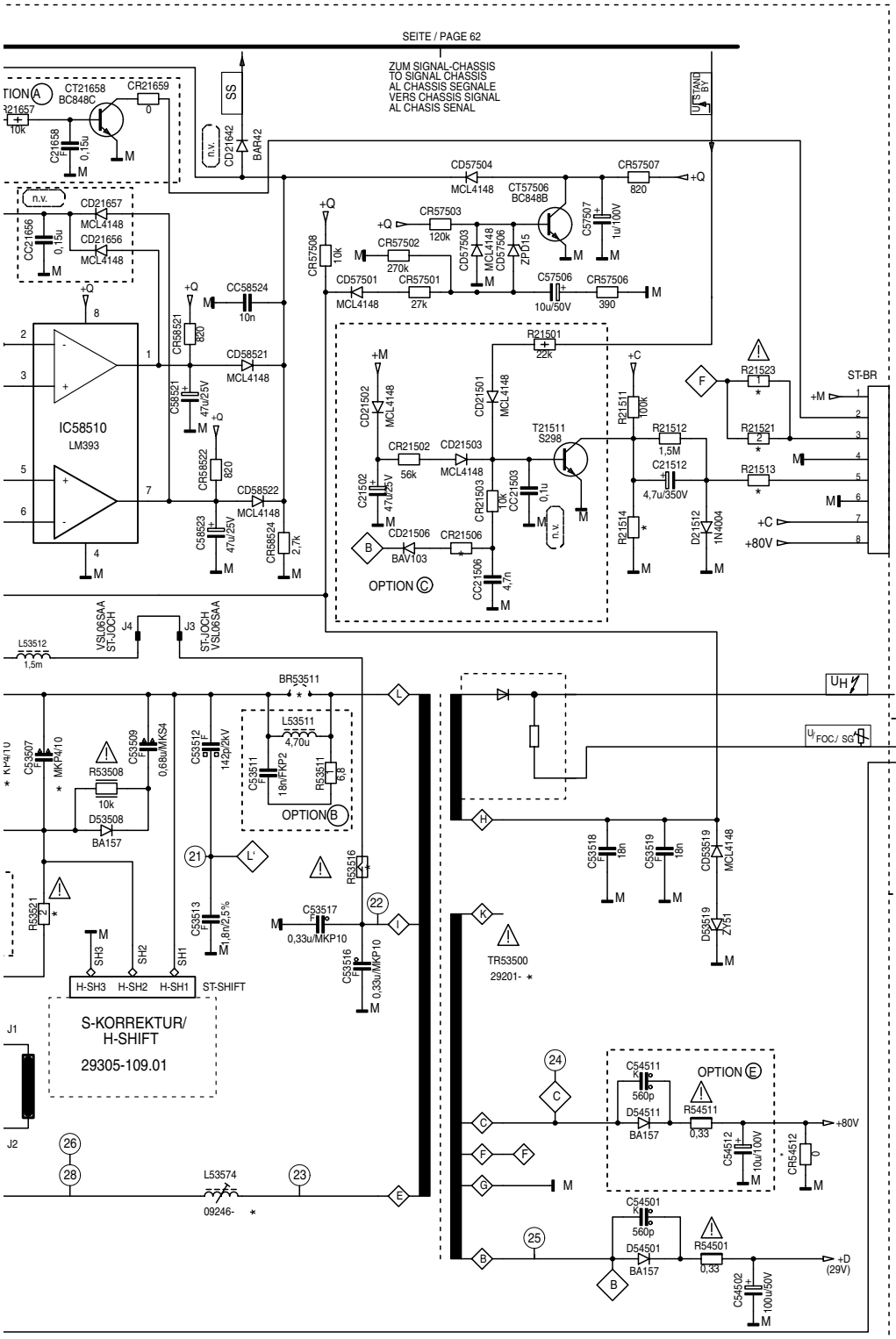



IC61535
L497B
+Q /8,5V
+G /16,5V
+G/14V
D-VERSTAERKER 5.1
D AMPLIFIER
AMPL. D
D AMPL.
AMPL. D
AP = -14V gegen ⊥A und ⊥V bei D-VERSTAERKER
AP = -14V between ⊥A and ⊥V at D-AMPLIFIER
+C /200V
+A TABELLE / TABLE
SEITE / PAGE 59/60
+D /26V
+M /16,5V
+33V
ZUR NETZSCHALTERPLATTE
TO MAINS SWITCH BOARD
SEITE / PAGE 3-62
+14,7V
+K /14V
-K /14V
-14,7V
IC61545
L4978
+F/1
+F /5V
IC61555
L4978
+N
/3,3V
TRAP
ROT
OWA
VERT-
VERT+
VG




Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

The measured values given in the circuit diagrams are approximates!




AENDERUNGEN VORBEHALTEN
SUBJECT TO ALTERNATE
SOURS RESERVE DE MODIFIC
CON RISERVA DI MODIFICA
RESERV. EL DEREC. DE MODIFIC.

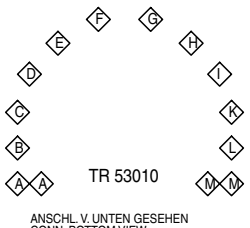
240402
21920-907.0100

HASSIS

JR

D

CUC 1807
CUC 1837
CUC 1838
CUC 1839
CUC 1934
CUC 1935
CUC 1937




ANSCHL. V. UNTEN GESEHEN
CONN. BOTTOM VIEW
CONN. VUES DE DESSOUS
COLLEGAM. VISTI DI SOTTO
CONEXIONES VISTAS POR DEBAJO

| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT<br>/Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT<br>/Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

# Chassis-Bestückung Teil 1 / Chassis Fittings Part 1

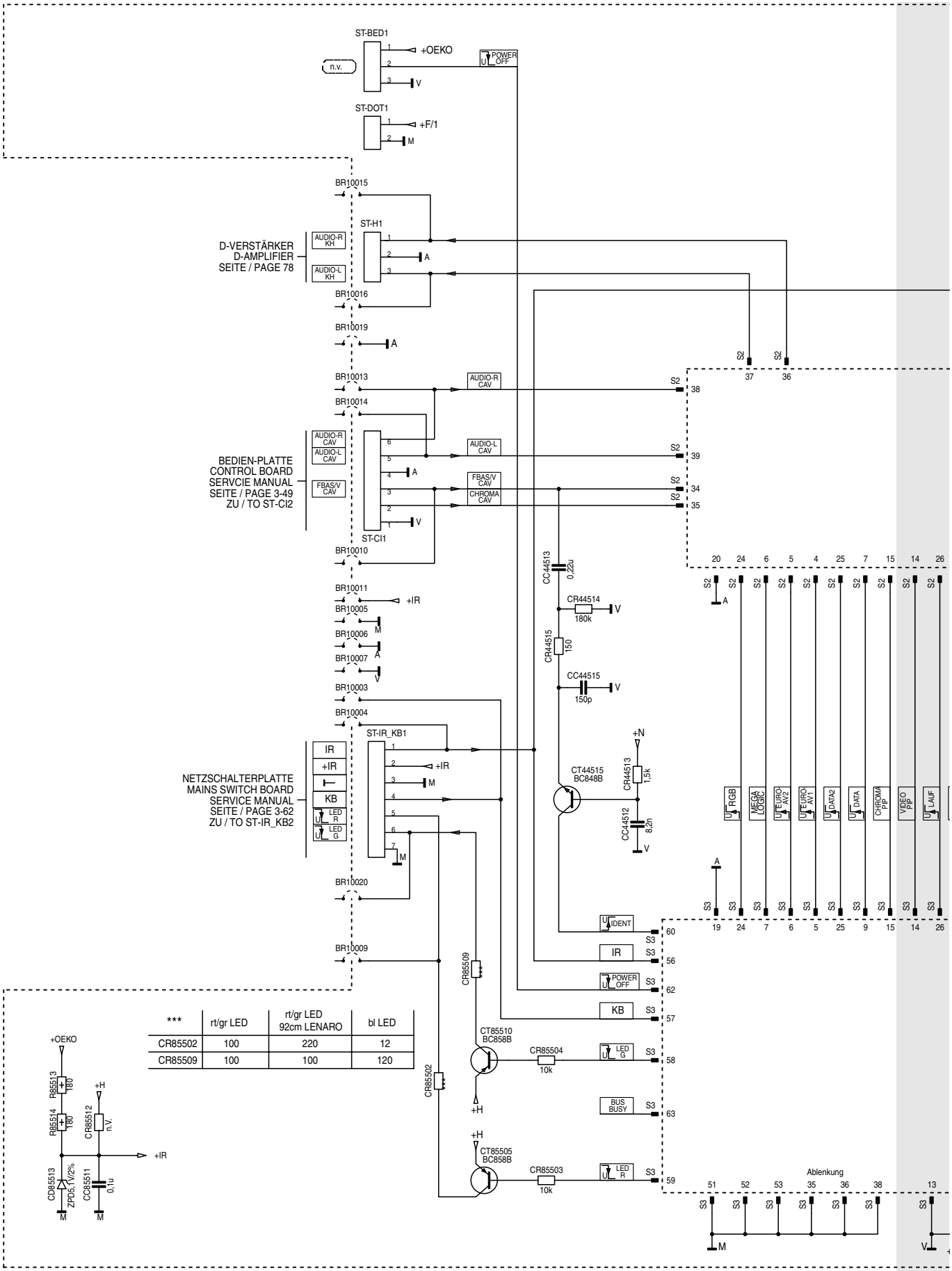
| Bildroehre Cinescopio Picture tube | PHI 55cm 4:3 | TOSH RF 55cm 4:3 | PHI BL-D 63cm 4:3 | PHI BL-S 63cm 4:3 | PHI BL-D 70cm 4:3 | PHI BL-S 70cm 4:3 | PANASONIC 70cm 4:3 | PHI SF 72cm/(72cm GM) 4:3 | PHI RF 72cm 4:3 | TOSH RF 72cm V1 4:3 | TOSH RF 72cm V2 4:3 | SAM RF 72cm DAF 4:3 | SAM RF 72cm 4:3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A51EHE175X50 | A51LSH196X95 | A59EAK071X44 | A59EAK652X44 A59EAK252X44 | A66EAK071X44 | A66EAK652X44 | A66ECF50X56 | A68ESF202X143 | A68ERF231X044 | A68LQP356X97 | A68LTF356X96 | A68QCP891X539 | A68QCP893X539 |
| 8300- | 020-360 | 020-696 | 020-412 | 020-413 | 030-436 | 030-475 | 030-485 | 068-204 | 068-331 | 068-356 | 068-357 | 068-891 | 068-894 |
| * CHASSIS | CUC1807 | CUC1807 | CUC1837 | CUC1837 | CUC1837 | CUC1837 | CUC1837 | CUC1838 | CUC1838 | CUC1838 | CUC1838 | CUC1838 | CUC1838 |
| +A | 146V | 146V | 135V | 143V | 135V | 144V | 146V | 138V | 136V | 140V | 136V | 135V | 135V |
| CR21506 | 62k | 62k | 68k | 56k | 68k | 68k | 75k | — | — | 68k | 68k | 68k | 68k |
| R21513 | 10k | 10k | 10k | 10k | 10k | 10k | 10k | 100k | 10k | 10k | 10k | 10k | 10k |
| R21514 | — | — | — | 820k | — | — | — | 100k | 100k | — | — | — | — |
| R21521 | — | — | — | — | — | — | — | — | — | — | — | 2,7/2W | — |
| R21523 | 6,2 | 5,6/1W | 3,9 | 5,1 | 3,9 | 6,8 | 6,2 | 6,2 | 5,6 | 5,1 | 4,7/1W | — | 5,1/1W |
| R22501 | -016 | -016 | -016 | -016 | -016 | -016 | -016 | -016 | -018 | -018 | -018 | -018 | -018 |
| R50507/R50508 | 3/1% | 2,4/1% | 1,6/1% | 1,5/1% | 1,5/1% | 1,5/1% | 1,3/1% | 1,6/1% | 1,6/1% | 2,2/1% | 1,5/1% | 1,3/1% | 1,3/1% |
| C50512 | 1000u/25V | 1000u/25V | 1000u/25V | 1000u/25V | 1000u/25V | 1000u/25V | 1000u/25V | 2200u/25V | 2200u/25V | 1000u/25V | 1000u/25V | 1000u/25V | 1000u/25V |
| CC50513 | — | — | ? | — | — | 0,1u | — | — | — | — | — | — | — |
| C50526 | 1000u/25V | 1000u/25V | 1000u/25V | 1000u/25V | 1000u/25V | 1000u/25V | 1000u/25V | 2200u/25V | 2200u/25V | 1000u/25V | 1000u/25V | 1000u/25V | 1000u/25V |
| R50526 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | — | 1,5 | 1,5 | 2,2 | 1,5 | 1,5 | 1,5 |
| R50527 | — | — | — | — | — | — | 1,5 | — | — | — | — | — | — |
| C50527 | 0,1u | 0,1u | 0,1u | 0,1u | 0,1u | 0,1u | 0,1u | 0,1u | 0,1u | 0,22u | 0,1u | 0,1u | 0,1u |
| R50529 | 270 | 180 | 270 | 270 | 270 | 270 | 150 | 270 | 270 | 270 | — | 150 | 150 |
| R50531 | — | — | — | — | — | — | — | — | — | — | 180/2W | — | — |
| R52501 | — | — | 8,2 | 8,2 | 8,2 | 6,8 | 6,8 | 4,7 | 4,7 | 4,7 | 4,7 | 4,7 | 4,7 |
| TR52501 | 6-812.96 | -812.96 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 |
| SI52501 | T160mA_L | T160mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L |
| R52502 | 33 | 33 | — | — | — | — | — | — | — | — | — | — | — |
| R52505 | 6,8 | 6,8 | 5,6 | 4,7 | 4,7 | 3,9 | 3,9 | 4,3 | 3,3 | 3,3 | 4,3 | 4,7 | 4,7 |
| R52506 | 6,8 | 6,8 | 6,8 | 4,7 | 4,7 | 3,9 | 3,9 | 4,3 | 3,9 | 3,9 | 4,3 | 4,7 | 4,7 |
| TR53500 | -680.02 | -680.02 | -680.04 | -680.02 | -680.04 | -680.03 | -680.03 | -680.03 | -680.06 | -680.03 | -680.07 | -680.06 | -680.06 |
| C53506 | 0,25u | 0,17u | 0,3u | 0,3u | 0,41u | 0,41u | 0,41u | 0,41u | 0,3u | 0,3u | 0,3u | 0,3u | 0,3u |
| C53507 | 0,25u | 0,17u | 0,3u | 0,3u | 0,41u | 0,41u | 0,41u | 0,41u | 0,3u | 0,3u | 0,3u | 0,3u | 0,3u |
| R53516 | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W |
| R53521 | 390 | 390 | 220 | 220 | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 390 |
| L53521 | -119.97 | -119.97 | -122.95 | -122.95 | -122.95 | -122.95 | -122.95 | -122.95 | -125.95 | -122.95 | -122.95 | -125.95 | -125.95 |
| C53571 | 6,8n | 6,8n | 11n | 11n | 12n | 12n | 12n | 12n | 13n | 12n | 12n | 12n | 12n |
| C53572 | 27n | 27n | 20n | 27n | 20n | 20n | 20n | 20n | 20n | 20n | 20n | 20n | 20n |
| C53573 | 0,47u | 0,47u | 0,47u | 0,47u | 0,47u | 0,47u | 0,47u | 0,56u | 0,56u | 0,68u | 0,68u | 0,56u | 0,56u |
| L53574 | -859.64 | -859.64 | -859.65 | -859.63 | -859.65 | -859.61 | -859.61 | -859.55 | -859.66 | -859.63 | -859.63 | -859.66 | -859.66 |
| CR54512 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 / ( ) — | — | — | — | — | — |
| R55502 | 1,8k/2% | 1,8k/2% | 1,8k/2% | 1,8k/2% | 1,8k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% |
| CD55503 | 4,3V/2% | 4,3V/2% | 4,3V/2% | 3,9V/2% | 4,3V/2% | 4,3V/2% | 4,3V/2% | 4,3V/2% | 4,3V/2% | 3,9V/2% | 4,3V/2% | 4,3V/2% | 4,3V/2% |
| C55504 | 22n | 22n | 22n | 22n | 22n | 22n | 22n | 22n | 22n | 22n | 22n | 22n | 22n |
| CR55507 | 82k | 82k | 82k | 82k | 82k | 82k | 82k | 82k | 82k | 82k | 82k | 82k | 82k |
| R55512 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 560 | 680 | 680 | 680 | 680 | 680 |
| R58502 | 3k/2% | 3k/2% | 3,6k/2% | 3,3k/2% | 3,6k/2% | 3,6k/2% | 3,6k/2% | 3,9k/2% | 3,9k/2% | 3,9k/2% | 3,6k/2% | 3,9k/2% | 3,9k/2% |
| CR58504 | 13k/2% | 13k/2% | 13k/2% | 13k/2% | 13k/2% | 12k/2% | 12k/2% | 12k/2% | 12k/2% | 12k/2% | 13k/2% | 12k/2% | 12k/2% |
| C58511 | 0,68u/5% | 0,68u/5% | 0,47/5% | 0,56u/5% | 0,47u/5% | 0,47u/5% | 0,47u/5% | 0,56u/5% | 0,47u/5% | 0,47u/5% | 0,47u/5% | 0,47u/5% | 0,47u/5% |
| CR58511 | 1,2k/2% | 1,8k/2% | 1,2k/2% | 1,2k/2% | 1,2k/2% | 1,2k/2% | 1,2k/2% | 1,2k/2% | 3,3k/2% | 4,7k/2% | 2,7k | 2,7k/2% | 2,7k/2% |
| CR58512 | 1,5k/2% | 1,5k/2% | 1,5k/2% | 1,5k/2% | 1,2k/2% | 1,2k/2% | 2,7k/2% | 1,5k/2% | 1,5k/2% | 1,5k/2% | 1,5k/2% | 1,5k/2% | 1,5k/2% |
| BR58515 | — | — | — | — | — | — | — | — | X | X | X | X | — |
| TR60500 | -581.97 | -581.97 | -580.97 | -581.97 | -580.97 | -581.97 | -581.97 | -585.97 | -584.97 | -584.97 | -584.97 | -584.97 | -584.97 |
| TR60500 SUBWOOF AC3/DD | -589.97 | -589.97 | | -589.97 | | -589.97 | -589.97 | | | | | | |
| R60504 | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% |
| R60512 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| C60518 | 15n | 15n | 10n | 10n | 10n | 10n | 10n | 10n | 10n | 10n | 10n | 10n | 10n |
| CR61501 | 68k | 68k | 68k | 68k | 68k | 68k | 68k | 68k | 68k | 68k | 68k | 68k | 68k |
| CC61502 | 47n | 47n | 47n | 47n | 47n | 47n | 47n | 47n | 47n | 47n | 47n | 47n | 47n |
| CR61505 | 82k | 62k | 82k | 82k | 82k | 82k | 82k | 82k | 82k | 82k | 82k | 82k | 82k |
| CR61507 | 15k | 15k | 3,3k | 15k | 3,3k | 15k | 15k | 15k | 4,7k | 15k | 4,7k | 15k | 15k |
| CC61508 | 3,3n | 3,3n | 3,3n | 3,3n | 3,3n | 3,3n | 3,3n | 3,3n | 3,3n | 3,3n | 3,3n | 3,3n | 3,3n |
| C61513 | 4,7u/350V | 4,7u/350V | 4,7u/350V | 4,7u/350V | 4,7u/350V | 4,7u/350V | 4,7u/350V | 22u/350V | 22u/350V | 4,7u/350V | 4,7u/350V | 4,7u/350V | 4,7u/350V |
| D70504 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| BR70504 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R61562/R61563 | 470 | 470 | 470 | 470 | 470 | 470 | 470 | 470 | 1,2k | 2,2k | 2,2k | 1,2k | 1,2k |
| L61562/L61567 | 47u | 47u | 47u | 47u | 47u | 47u | 47u | 47u | — | 47u | 47u | — | — |
| D61562/D61567 | — | — | — | — | — | — | — | — | 1N4004 | — | — | 1N4004 | 1N4004 |
| BR61563/BR61568 | X | X | X | X | X | X | X | X | — | X | X | X | — |
| D61563/D61568 | — | — | — | — | — | — | — | — | 1N4004 | — | — | — | 1N4004 |
| BR62501/02/03 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| OPTION A | — | — | — | — | — | — | — | X | X | — | — | — | — |
| OPTION B | X | X | X | X | X | X | X | X | X | X | X | X | X |
| BR53511 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| L53511 | 10u | 10u | 10u | 10u | 10u | 10u | 10u | 10u | 10u | 10u | 10u | 10u | 10u |
| OPTION C | X | X | X | X | X | X | X | — | — | X | X | X | X |
| OPTION E | — | — | — | — | — | — | — | — /( X ) | X | X | X | X | X |
| OPTION N1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| DYN.-FOK. | — | — | — | — | — | — | — | — | -025.47 | -025.43 | -025.43 | -025.49 | — |
| FOKUS BLOCK | — | — | — | — | — | — | — | — | X | — | — | X | — |
| BR-PL. | -122.31 | -122.31 | 29305-122.31 | -122.31 | -122.31 | -122.31 | -122.31 | -122.31/(.33) | -122.34 | -122.32 | -122.32 | 122.43 | 122.45 |
| S-KORREKTUR | — | — | — | — | — | — | — | — | — | — | — | — | — |
| R53511 | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W |

# Chassis-Bestückung Teil 2 / Chassis Fittings Part 2

| Bildroehre Cinescopio Picture tube | VC 84cm 4:3 A80EJA33X122 A80EJA33X522 | TOSH RF 84cm 4:3 A80LTM350X98 | THOMSON RF 84cm 4:3 A80EJX011X127 | PHI 70cm 16:9 W66ESF202X44 | PHI 70cm/(70cm GM) 16:9 W66ESF202X44 | PHI RF 70cm 16:9 W66ERF341X044 W66ERF331X044 | PHI 82cm 16:9 W76ESF231X44 | PHI RF 82cm 16:9 W76ERF341X044 W76ERF331X044 | PHI RF 82cm 16:9 W76ERF342X044 | TOSH RF 82cm V2 16:9 W76LTL350X97 | TOSH RF 82cm V2 16:9 W76LTL350X97 Chas. 011.56 | TOSH RF 92cm 16:9 W86LQQ350X97 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8300- | 020-812 | 020-830 | | 066-203 | 066-203 | 066-231 | 076-231 | 076-031 | 066-342 | 076-360 | 076-360 | 020-870 |
| * CHASSIS | CUC1839 | CUC1840 | | CUC1934 | CUC1934 | CUC1934 | CUC1935 | CUC1935 | | CUC1935 | CUC1935 | CUC1937 |
| +A | 145V | 138V | 135V | 143V | 143V | 134V | 141V | 142V | 142V | 123V | 123V | 103V |
| CR21506 | 68k | 68k | | — | — | — | — | — | — | 68k | 68k | 62k |
| R21513 | 10k | 10k | | 10k | 10k | 10k | 10k | 10k | 10k | 10k | 10k | 10k |
| R21514 | — | — | | 100k | 100k | 100k | 100k | 100k | 100k | — | — | — |
| R21521 | 2,7/2W | — | 2,2/2W | — | — | — | — | — | — | | | — |
| R21523 | — | 4,7/1W | — | 6,8 | 6,8 | 4,7 | 6,8 | 6,8 | 6,8 | 2,7/1W | 2,7/1W | 3,9/1W |
| R22501 | -018 | -018 | | -018 | -018 | -018 | -018 | -018 | -018 | -018 | -018 | -018 |
| R50507/R50508 | 1,6/1% | 2,0/1% | | 2,4/1% | 2,4/1% | 1,8/1% | 2,4/1% | 2,0/1% | 2,2/1% | 2,4/1% | 2,4/1% | 3,0/1% |
| C50512 | 1000u/25V | 1000u/25V | | 2200u/25V | 2200u/25V | 2200u/25V | 2200u/25V | 2200u/25V | 2200u/25V | 1000u/25V | 1000u/25V | 1000u/25V |
| CC50513 | — | — | | — | — | — | — | 0,1u | 0,1u | — | — | — |
| C50526 | 1000u/25V | 1000u/25V | | 2200u/25V | 2200u/25V | 2200u/25V | 2200u/25V | 2200u/25V | 2200u/25V | 1000u/25V | 1000u/25V | 1000u/25V |
| R50526 | 1,5 | 1,5 | | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | — | — | 1,5 |
| R50527 | — | — | | — | — | — | — | — | — | 2,7 | 2,7 | — |
| C50527 | 0,1u | 0,1u | | 0,1u | 0,1u | 0,1u | 0,1u | 0,1u | 0,1u | 0,1u | 0,1u | 0,22u |
| R50529 | 150 | 270 | | 270 | 270 | 130 | 270 | 130 | 130 | 150 | 150 | 270 |
| R50531 | — | — | | — | — | — | — | — | — | — | — | — |
| R52501 | 4,7 | 6,8 | 4,7 | 6,8 | 6,8 | 4,7 | 4,7 | 4,7 | 4,7 | 4,7 | 4,7 | 2,7 |
| TR52501 | 6-867.97 | 6-867.97 | -869.97 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 | 6-867.97 | -867.97 | -867.97 | -869.97 |
| SI52501 | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L | T315mA_L |
| R52502 | — | — | — | — | — | — | — | — | — | — | — | — |
| R52505 | 3,9 | 4,7 | 1,5 | 4,3 | 4,3 | 3,3 | 3,9 | 3,9 | 3,9 | 4,3 | 4,3 | 1,5 |
| R52506 | 3,9 | 4,7 | 1,8 | 4,3 | 4,3 | 3,9 | 3,3 | 3,9 | 3,9 | 3,9 | 3,9 | 1,5 |
| TR53500 | -680.03 | -680.09 | -680.06 | -680.03 | -680.03 | -680.05 | -680.03 | -680.03 | -680.03 | -680.08 | -680.08 | -680.10 |
| C53506 | 0,41u | 0,25u | 0,5u | 0,41u | 0,41u | 0,3u | 0,41u | 0,25u | 0,25u | 0,25u | 0,25u | 0,25u |
| C53507 | 0,41u | 0,17u | 0,5u | 0,3u | 0,3u | 0,25u | 0,3u | 0,25u | 0,25u | 0,25u | 0,25u | 0,3u |
| R53516 | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 6,8/7W | 3,3/7W |
| R53521 | 560 | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 390 |
| L53521 | -122.95 | -122.95 | -125.95 | -122.95 | -122.95 | -122.95 | -122.95 | -122.95 | -122.95 | -122.95 | -122.95 | -125.95 |
| C53571 | 13n | 11n | 14,3n | 12,5n | 12,5n | 14,3n | 13n | 12n | 12n | 13n | 13n | 19,5n |
| C53572 | 20n | 20n | 20n | 20n | 20n | 20n | 20n | 20n | 20n | 20n | 20n | 27n |
| C53573 | 0,68u | 0,68u | 0,68u | 0,68u | 0,68u | 0,68u | 0,68u | 0,68u | 0,68u | 0,68u | 0,68u | 1u |
| L53574 | -859.61 | -859.63 | -859.66 | -859.63 | -859.63 | -859.63 | -859.63 | -859.66 | -859.66 | -859.66 | -859.66 | -859.63 |
| CR54512 | — | — | | 0 | 0 / ( ) — | 0 | — | — | — | — | — | — |
| R55502 | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% | 2,2k/2% |
| CD55503 | 3,9V/2% | 4,3V/2% | 4,3V/2% | 4,3V/2% | 4,3V/2% | 3,9V/2% | 4,3V/2% | 4,3V/2% | 4,3V/2% | 4,3V/2% | 4,3V/2% | 4,3V/2% |
| C55504 | 22n | 22n | 22n | 22n | 22n | 0,1u | 22n | 0,15u | 0,15u | 22n | 22n | 22n |
| CR55507 | 150k | 56k | 82k | 82k | 82k | 150k | 82k | 150k | 150k | 39k | 39k | 39k |
| R55512 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 |
| R58502 | 3,6k/2% | 3,9k/2% | 3,9k/2% | 3,6k/2% | 3,6k/2% | 4,3k/2% | 3,6k/2% | 3,6k/2% | 3,6k/2% | 3,9k/2% | 3,9k/2% | 5,6k/2% |
| CR58504 | 12k/2% | 12k/2% | 12k/2% | 12k/2% | 12k/2% | 13k/2% | 12k/2% | 12k/2% | 12k/2% | 15k/2% | 15k/2% | 16k/2% |
| C58511 | 0,56u/5% | 0,47u/5% | | 0,56u/5% | 0,56u/5% | 0,68u/5% | 0,56u/5% | 0,68u/5% | 0,47u/5% | 0,47u/5% | 0,47u/5% | 0,47u/5% |
| CR58511 | 2,2k | 1,8k/2% | | 1,2k/2% | 1,2k/2% | 1,2k/2% | 1,2k/2% | 1,2k/2% | 1,2k/2% | 1,2k/2% | 1,2k/2% | 1,2k/2% |
| CR58512 | 2,2k/2% | 3,3k/2% | | 1,5k/2% | 1,5k/2% | 1,2k/2% | 1,2k/2% | 1k/1% | 1k/1% | 2,2k/2% | 2,2k/2% | 3,3k/2% |
| BR58515 | — | X | | — | — | X | X | X | X | X | X | X |
| TR60500 TR60500 SUBWOOF AC3/DD | -587.97 | -591.97 | | -581.97 -589.97 | -581.97 -589.97 | -580.97 | -581.97 -589.97 | -581.97 -589.97 | -581.97 -589.97 | -596.97 | -596.97 | neu -588.97 |
| R60504 | 680k/2% | 680k/2% | | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 680k/2% | 1M/2% | 680/2% |
| R60512 | 20 | 20 | | 20 | 20 | 20 | 20 | 20 | 20 | 3,3 | 3,3 | 33 |
| C60518 | 10n | 4,7n | | 10n | 10n | 10n | 10n | 4,7n | 4,7n | 4,7n | 4,7n | 4,7n |
| CR61501 | 68k | 56k | | 68k | 68k | 68k | 68k | 39k | 39k | 56k | 56k | 47k |
| CC61502 | 47n | 10n | | 47n | 47n | 47n | 47n | 4,7n | 4,7n | 10n/5% | 10n/5% | 220n |
| CR61505 | 75k | 82k | | 82k | 82k | 82k | 82k | 82k | 82k | 68k | 68k | 68k |
| CR61507 | 15k | 15k | | 15k | 15k | 3,3k | 10k | 15k | 15k | 6,8k | 6,8k | 0 |
| CC61508 | 3,3n | — | | 3,3n | 3,3n | 3,3n | 3,3n | — | — | — | — | — |
| C61513 | 4,7u/350V | 4,7u/350V | | 22u/350V | 22u/350V | 22u/350V | 22u/350V | 22u/350V | 22u/350V | 4,7u/350V | 4,7u/350V | 4,7u/350V |
| D70504 | — | — | — | — | — | — | — | — | — | — | X | X |
| BR70504 | X | X | X | X | X | X | X | X | X | X | — | — |
| R61562/R61563 | 2,2k | 2,2k | | 470 | 470 | 470 | 470 | 470 | 470 | 1,2k | 1,2k | 2,2k |
| L61562/L61567 | — | — | | 47u | 47u | 47u | 47u | 47u | 47u | — | — | — |
| D61562/D61567 | 1N4004 | 1N4004 | | — | — | — | — | — | — | 1N4004 | 1N4004 | 1N4004 |
| BR61563/BR61568 | — | — | | X | X | X | X | X | X | — | — | — |
| D61563/D61568 | 1N4004 | 1N4004 | | — | — | — | — | — | — | 1N4004 | 1N4004 | 1N4004 |
| BR62501/02/03 | X | X | | — | — | — | — | — | — | X | X | X |
| OPTION A | — | — | | X | X | X | X | X | X | — | — | — |
| OPTION B | X | X | X | X | X | X | X | X | X | X | X | — |
| BR53511 | — | — | — | — | — | — | — | — | — | — | — | X |
| L53511 | 4,7u | 10u | 4,7u | 10u | 10u | 10u | 10u | 10u | 10u | 4,7u | 4,7u | — |
| OPTION C | X | X | | — | — | — | — | — | | X | X | X |
| OPTION E | X | X | | — | — /( X ) | — | X | X | X | X | X | X |
| OPTION N1 | — | — | | X | X | X | X | X | X | — | — | — |
| DYN.-FOK. | — | -025.43 | -025.43 | — | — | -025.46 | 29305-025.44 | -025.45 | -025.50 | -025.51 | -025.51 | -025.48 |
| FOKUS BLOCK | — | — | | — | — | X | X | X | X | — | — | — |
| BR-PL. | -122.42 | -122.32 | | -122.31 | -122.31/(.33) | -122.35 | -122.36 | -122.34 | -122.34 | 122.32 | 122.32 | -122.32 |
| S-KORREKTUR | — | — | — | — | — | — | — | — | — | — | — | -109.01 |
| R53511 | 6,8/1W | 6,8/1W | 6,8/2W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | 6,8/1W | — |

# Signal-Chassis Teil 1 / Signal Chassis Part 1

Oszillogramme und Platinenabbildungen siehe Seite 19…29
Oscillograms and Layout of PCBs see Page 19…29



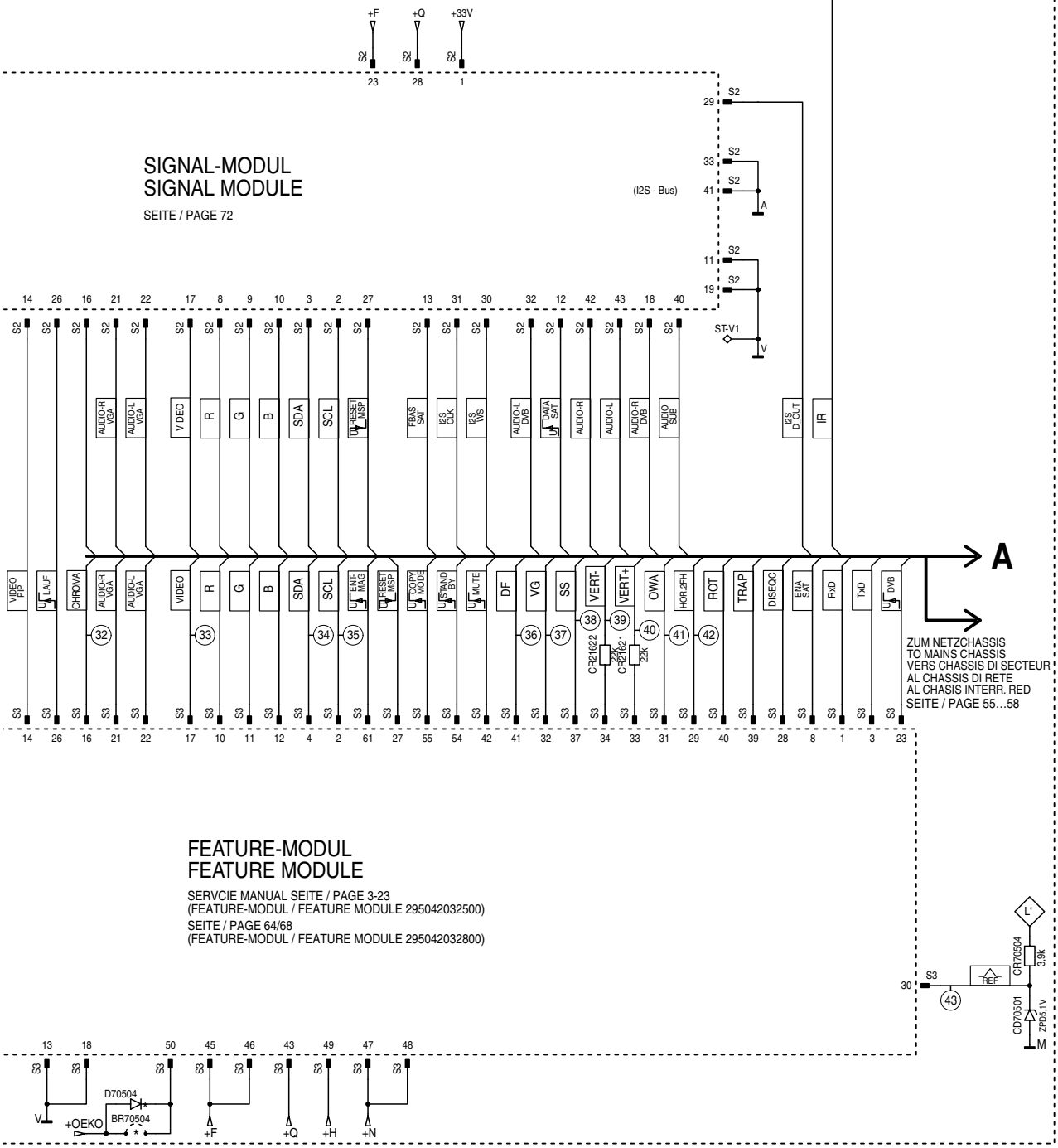

| *** | rt/gr LED | rt/gr LED 92cm LENARO | bl LED |
|---|---|---|---|
| CR85502 | 100 | 220 | 12 |
| CR85509 | 100 | 100 | 120 |

Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

The measured values given in the circuit diagrams are approximates!

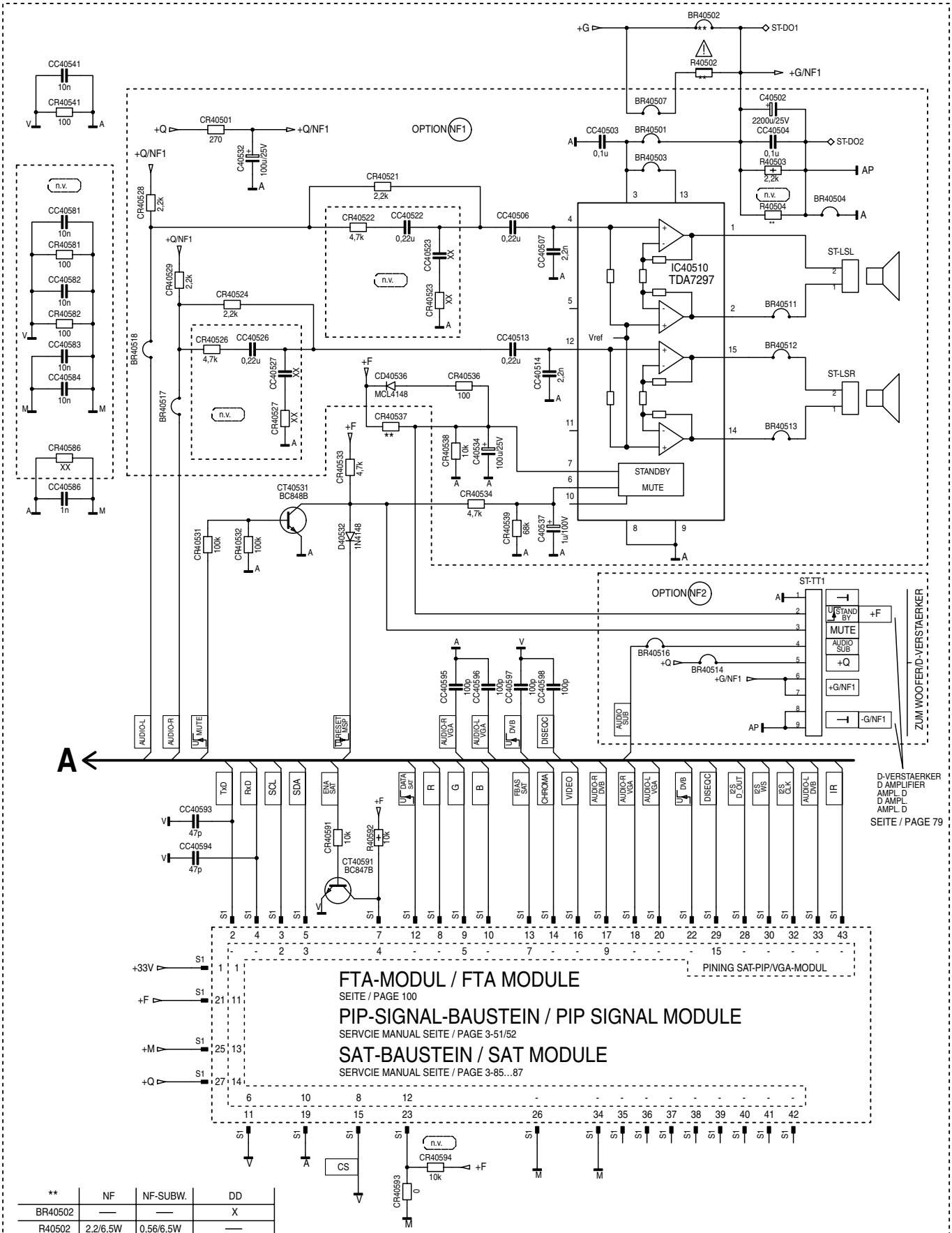
| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT<br>/Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT<br>/Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

→ +OEKO/ca.12V
→ +Q/+8V
→ +F/+5V
→ +N/3,3V
→ +H/3,3V stand by



# Signal-Chassis Teil 2 / Signal Chassis Part 2

Oszillogramme und Platinenabbildungen siehe Seite 19…29
Oscillograms and Layout of PCBs see Page 19…29

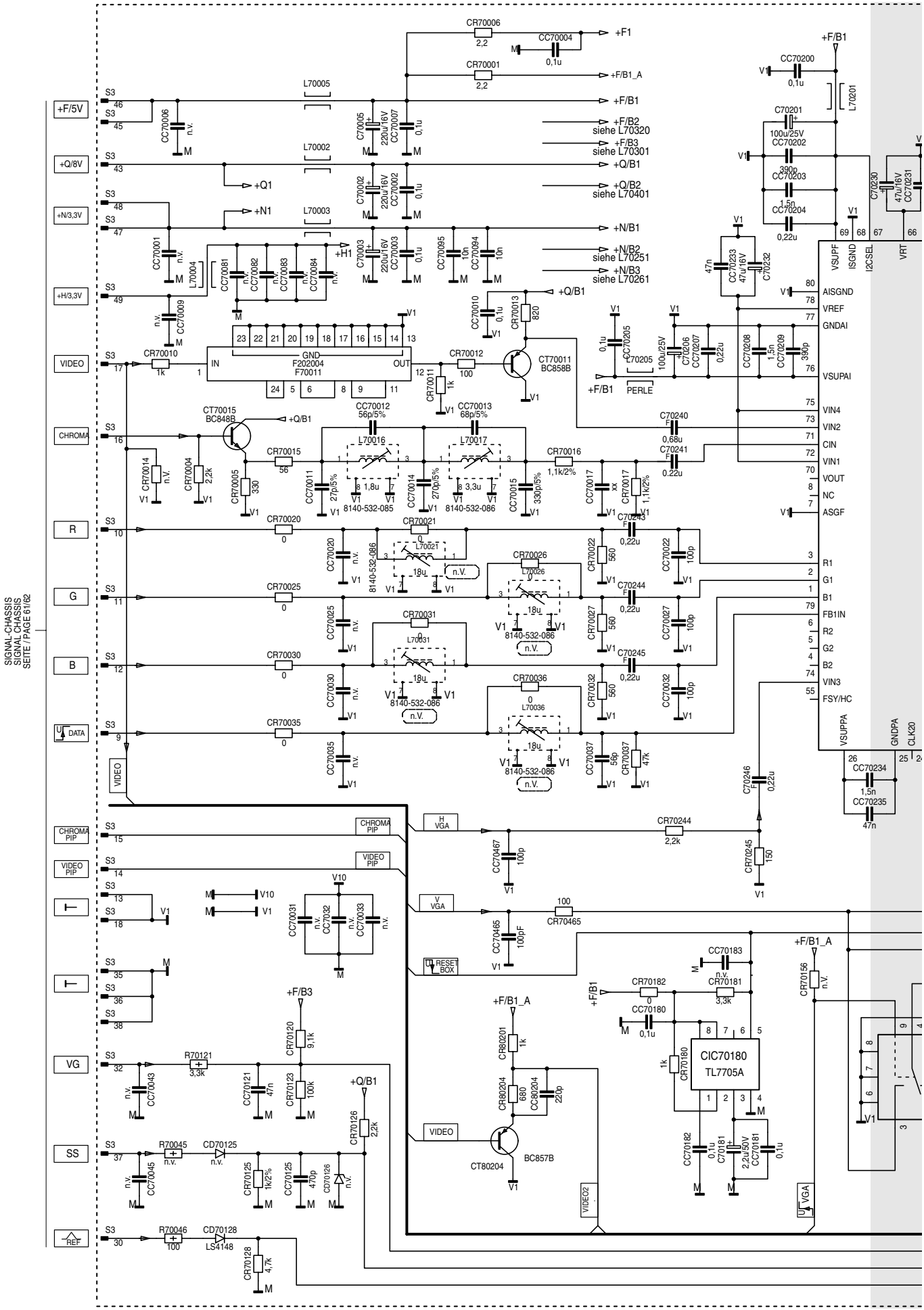


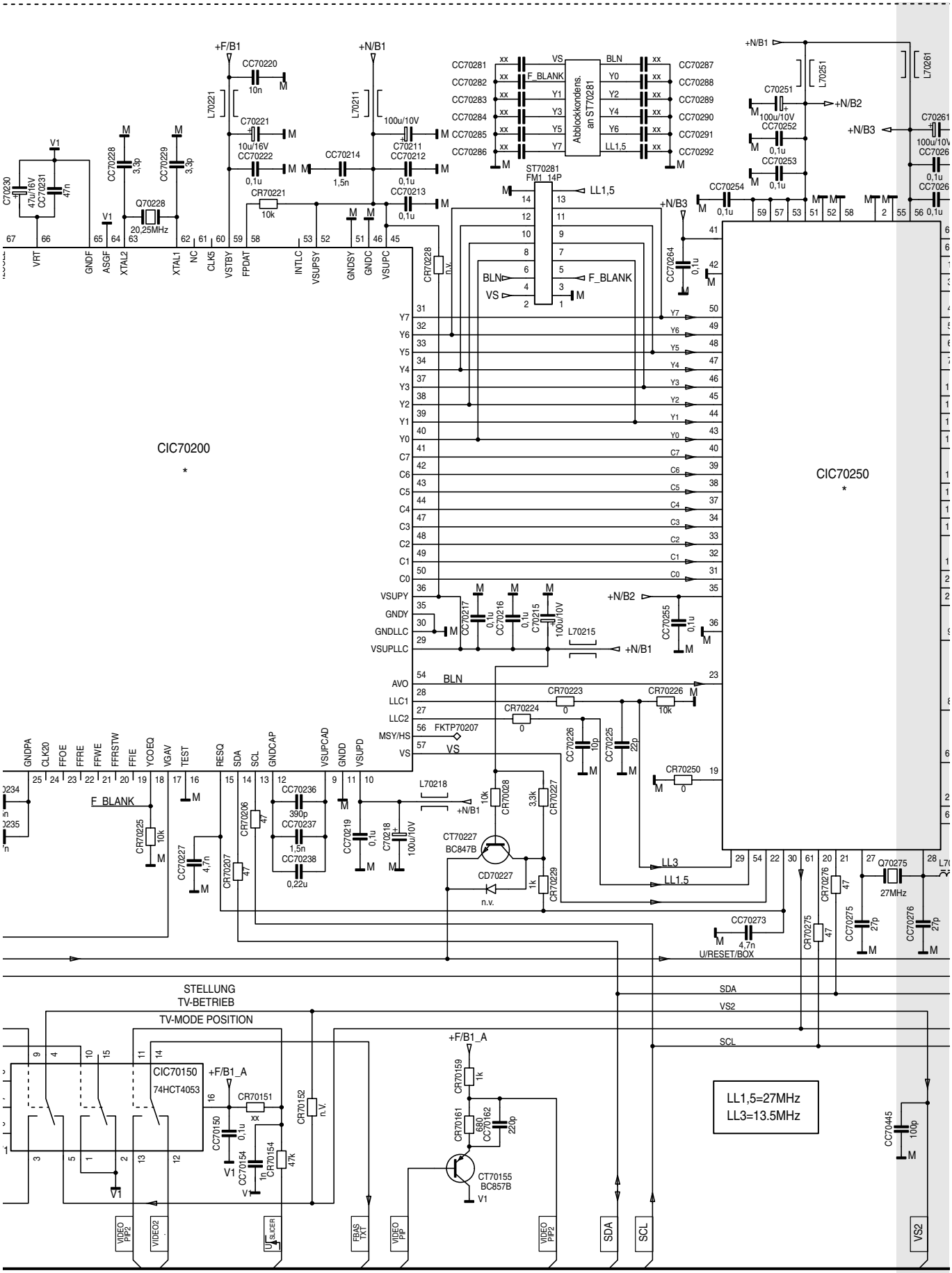

| ** | NF | NF-SUBW. | DD |
|---|---|---|---|
| BR40502 | —— | —— | X |
| R40502 | 2,2/6,5W | 0,56/6,5W | —— |
| CR40537 | 10k | 10k | 0 |
| D60523 | B380C1500 | B380C1500 | —— |
| D60524 | —— | —— | FBI3,7LM1FAG |
| D61521 | STPR820D | STPR1520D | STPR1520D |
| SI61521 | T2AL | T4AL | T4AL |
| OPTION NF1 | X | X | —— |
| OPTION NF2 | —— | X | X |

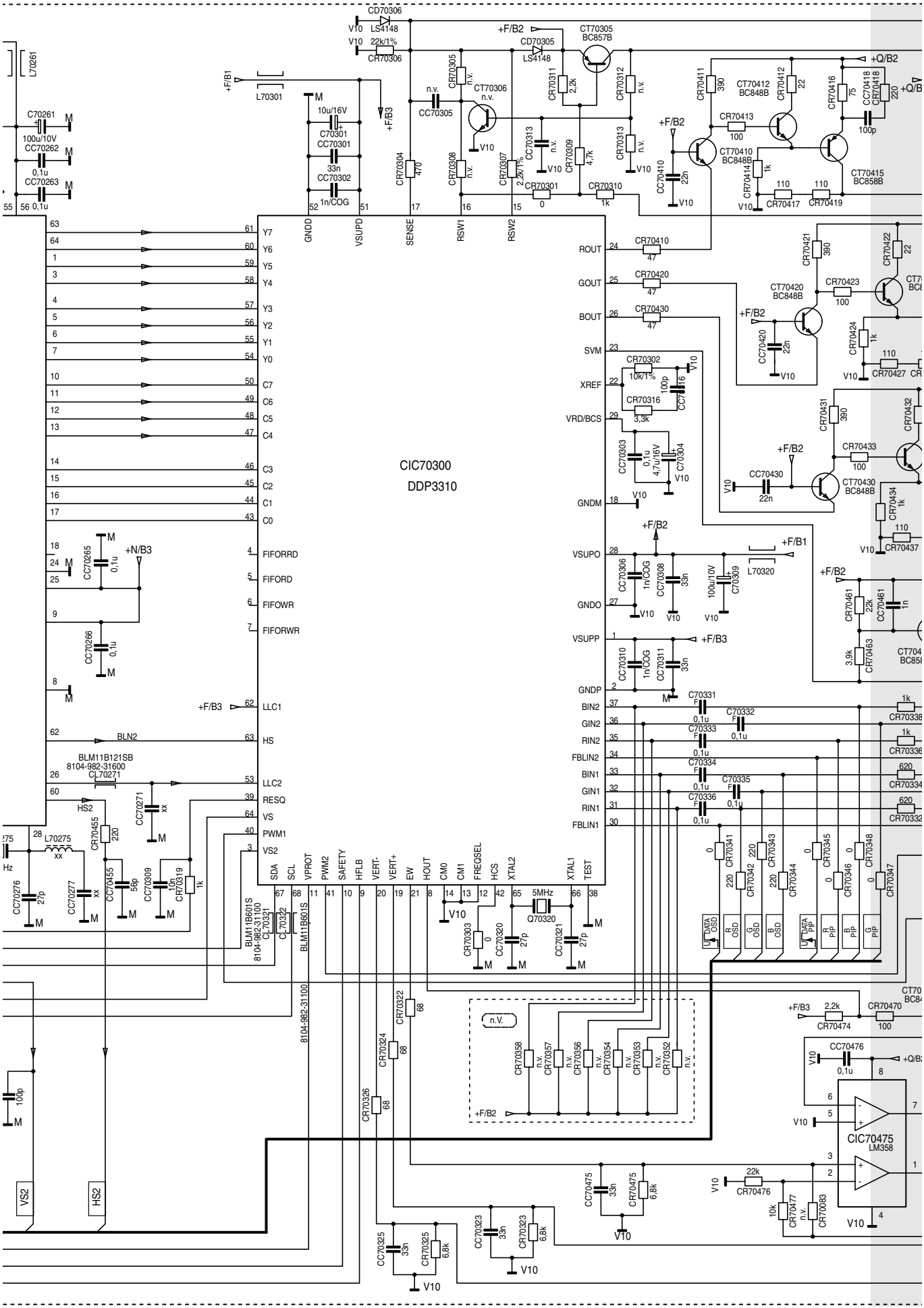
240402
21920-907.0100

# Feature-Modul Teil 1 / Feature Module Part 1 295042032800

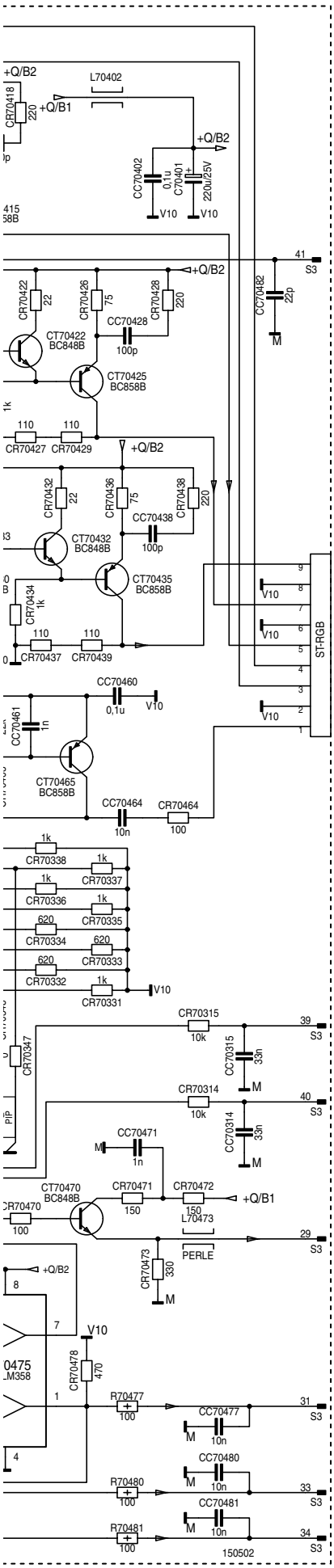
Platinenabbildungen siehe Seite 30…34
Layout of PCBs see Page 30…34



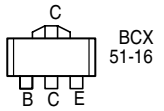

CIC70200
*
CIC70250
*
CIC70150
74HCT4053
STELLUNG
TV-BETRIEB
TV-MODE POSITION
LL1,5=27MHz
LL3=13.5MHz
F_BLANK
BLN
VS
SDA
SCL
VS2
U/RESET/BOX
+N/B1
+N/B2
+N/B3
+F/B1
+F/B1_A
Q70228
20,25MHz
Q70275
27MHz
ST70281
FM1 14P
Abblockkondens. an ST70281
CT70227
BC847B
CD70227
CT70155
BC857B
FKTP70207
L70215
L70218
L70221
L70251
L70261
VIDEO PIP2
VIDEO2
U SLICER
FBAS TXT
VIDEO PIP

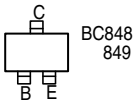

CIC70300
DDP3310
CIC70475
LM358
BLM11B121SB
8104-982-31600
CL70271
BLM11B601S
8104-982-31100
5MHz
Q70320
n.V.
VS2
HS2
BLN2
+F/B1
+F/B2
+F/B3
+N/B3
+Q/B2
+Q/B3
V10

| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT /Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT /Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

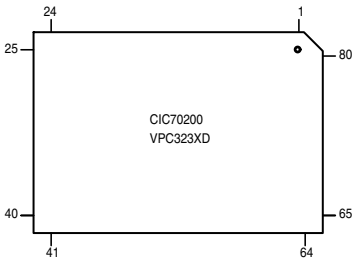


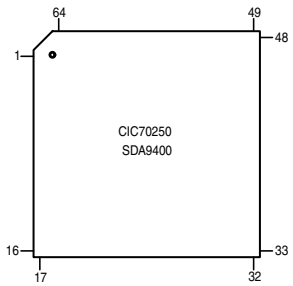

| | FEATURE MODUL |
|---|---|
| 01 | TXD |
| 02 | SCL |
| 03 | RXD |
| 04 | SDA |
| 05 | U_EURO AV1 |
| 06 | U_EURO AV2 |
| 07 | MEGALOGIC |
| 08 | ENA_SAT |
| 09 | U_DATA(FBL) |
| 10 | R |
| 11 | G |
| 12 | B |
| 13 | GND(VIDEO) |
| 14 | VIDEO PIP |
| 15 | CHROMA PIP |
| 16 | CHROMA |
| 17 | VIDEO |
| 18 | GND(VIDEO) |
| 19 | GND(AUDIO) |
| 20 | |
| 21 | AUDIO-R VGA |
| 22 | AUDIO-L VGA |
| 23 | U_DVB |
| 24 | U_RGB |
| 25 | U_DATA 2 |
| 26 | U_LAUF |
| 27 | U_RESET_MSP |
| 28 | DiSEqC |
| 29 | HOR_2FH |
| 30 | HOR_FH |
| 31 | OWA |
| 32 | VG |
| 33 | +VERT |
| 34 | -VERT |
| 35 | GND(ABL) |
| 36 | GND(ABL) |
| 37 | SS |
| 38 | I_BEAM |
| 39 | TRAP |
| 40 | ROT |
| 41 | DF |
| 42 | U_MUTE |
| 43 | +8V(+Q) |
| 44 | |
| 45 | +5V(+F) |
| 46 | +5V(+F) |
| 47 | +3,3V(+N) |
| 48 | +3,3V(+N) |
| 49 | +3,3V(+H) |
| 50 | +OEKO ca.12V |
| 51 | GND(NT) |
| 52 | GND(NT) |
| 53 | GND(NT) |
| 54 | U_STAND_BY |
| 55 | U_COPY_MODE |
| 56 | IR |
| 57 | KB |
| 58 | LED gruen |
| 59 | LED rot |
| 60 | U_IDENT |
| 61 | U_ENTMAG |
| 62 | POWER OFF |
| 63 | BUS/BUSY |

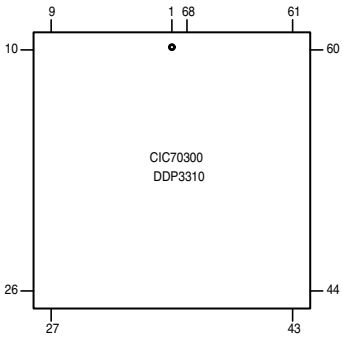


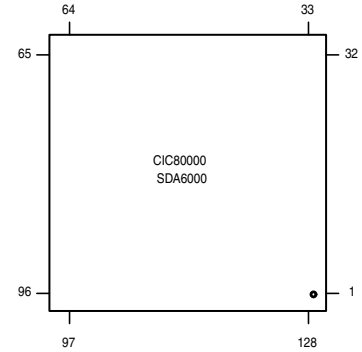




IC VON OBEN
IC TOP VIEW
IC VUES DE DESSOUS
IC VEDUTO DA SOPRA
IC VISTO DESDE ARRIBA



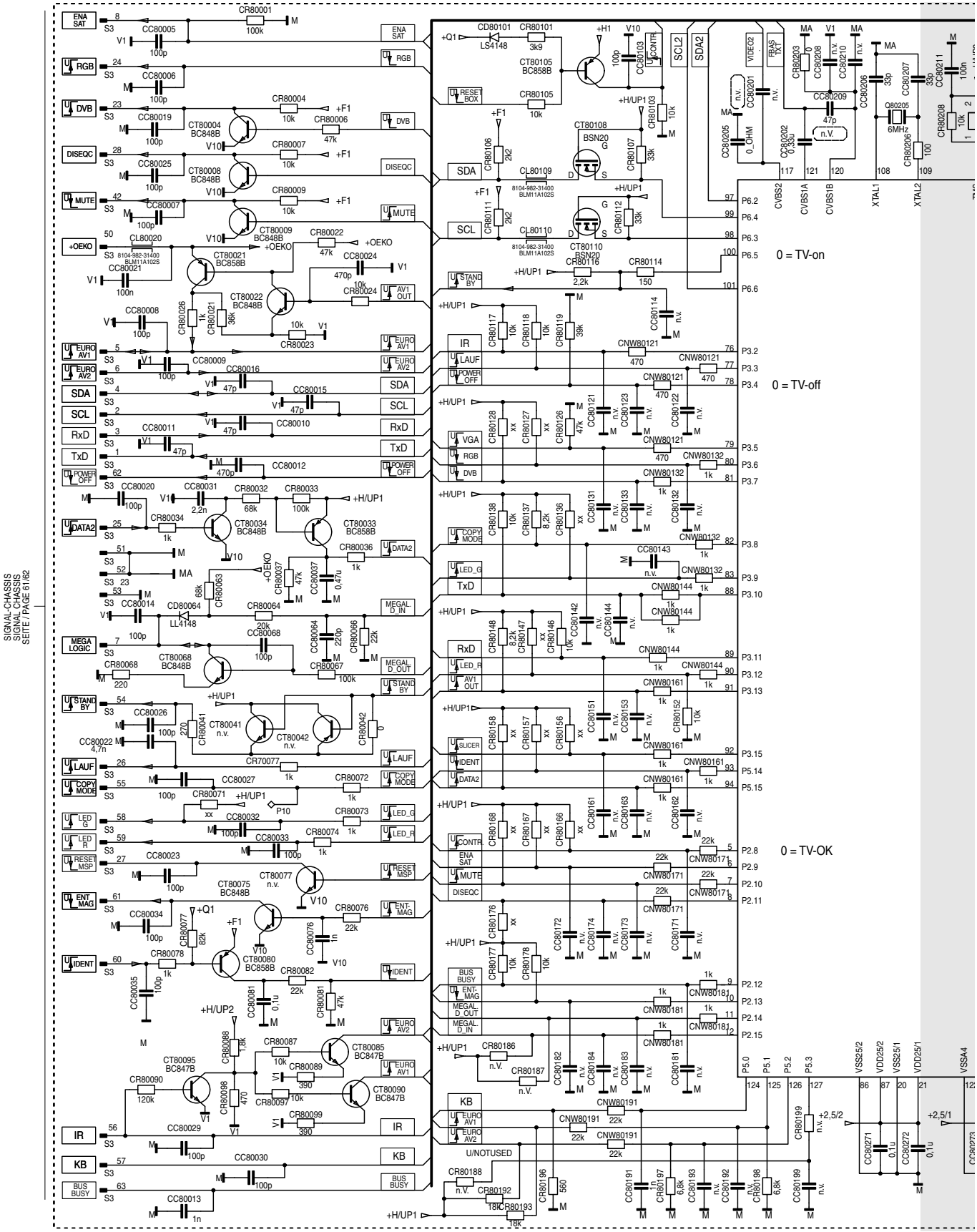



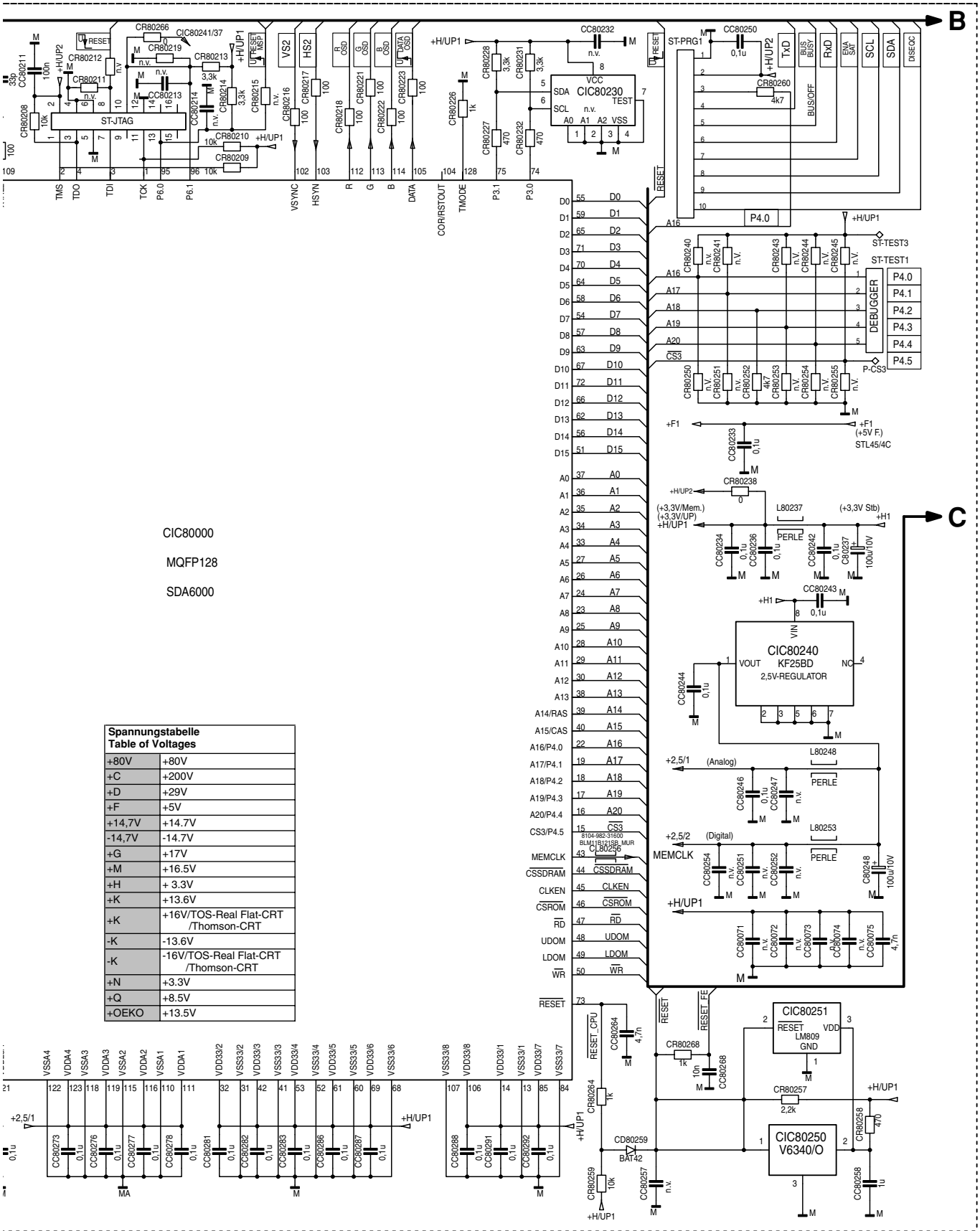

Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

The measured values given in the circuit diagrams are approximates!

# Feature-Modul Teil 2 / Feature Module Part 2 295042032800

Platinenabbildungen siehe Seite 30…34
Layout of PCBs see Page 30…34





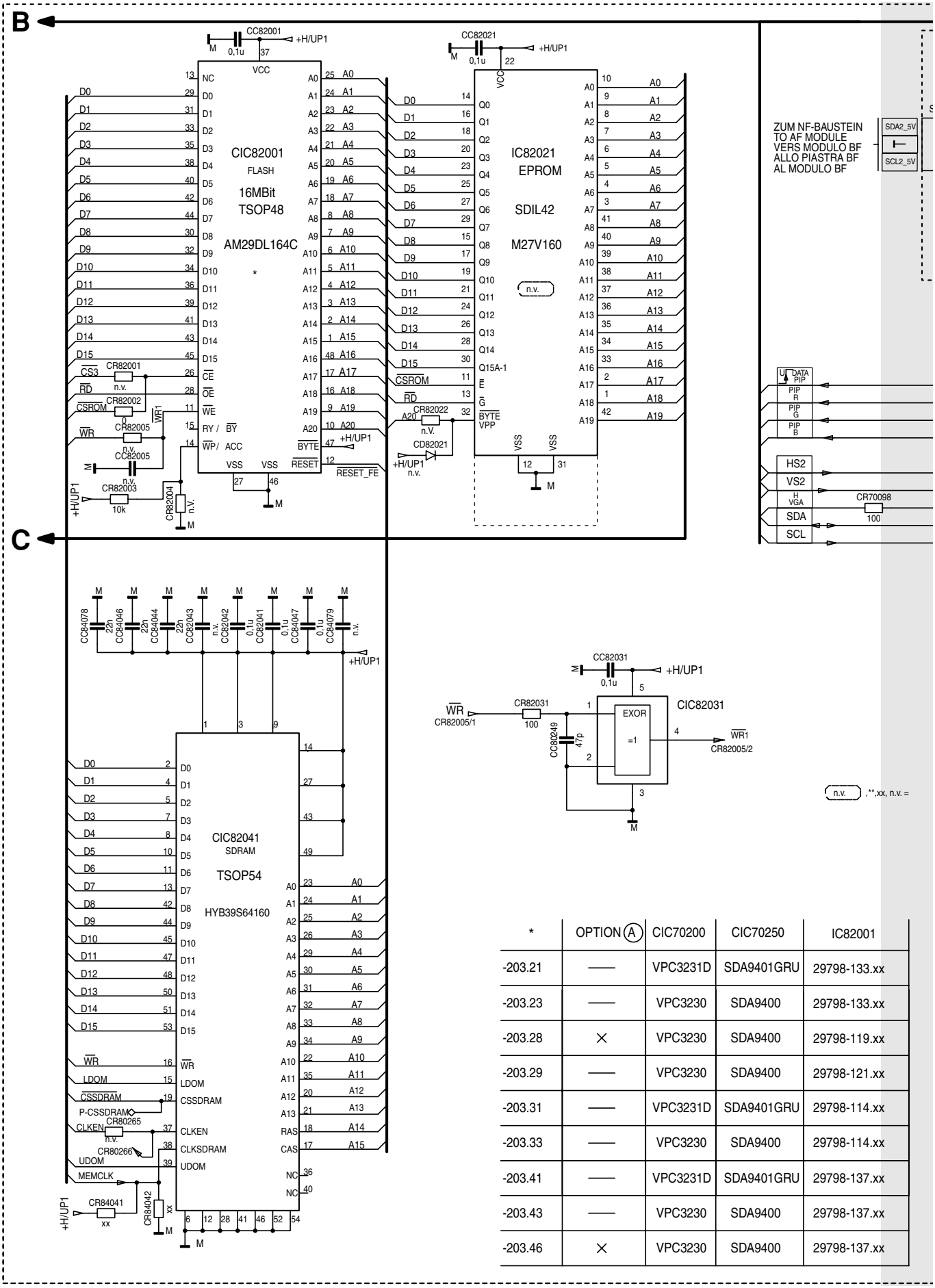

| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT /Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT /Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

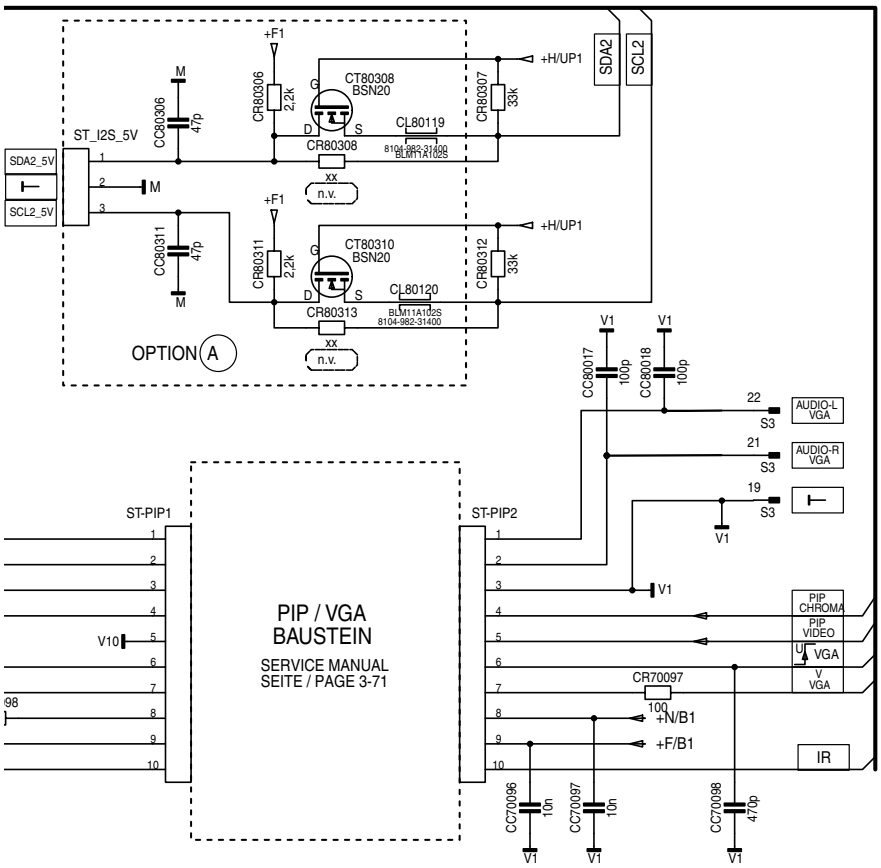
The measured values given in the circuit diagrams are approximates!

# Feature-Modul Teil 3 / Feature Module Part 3 295042032800

Platinenabbildungen siehe Seite 30…34
Layout of PCBs see Page 30…34




| * | OPTION Ⓐ | CIC70200 | CIC70250 | IC82001 |
|---|---|---|---|---|
| -203.21 | —— | VPC3231D | SDA9401GRU | 29798-133.xx |
| -203.23 | —— | VPC3230 | SDA9400 | 29798-133.xx |
| -203.28 | × | VPC3230 | SDA9400 | 29798-119.xx |
| -203.29 | —— | VPC3230 | SDA9400 | 29798-121.xx |
| -203.31 | —— | VPC3231D | SDA9401GRU | 29798-114.xx |
| -203.33 | —— | VPC3230 | SDA9400 | 29798-114.xx |
| -203.41 | —— | VPC3231D | SDA9401GRU | 29798-137.xx |
| -203.43 | —— | VPC3230 | SDA9400 | 29798-137.xx |
| -203.46 | × | VPC3230 | SDA9400 | 29798-137.xx |




| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT<br>/Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT<br>/Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

FEATURE-MODUL 29504-203.2100
-203.2300
-203.2800
-203.2900
-203.3100
-203.3300
-203.4100
-203.4300
-203.4600

x, n.v. = NUR VORGESEHEN
ONLY IF REQUIRED
PREVU
SOLO PREVISIO
SOLAM PREVISTO PARA

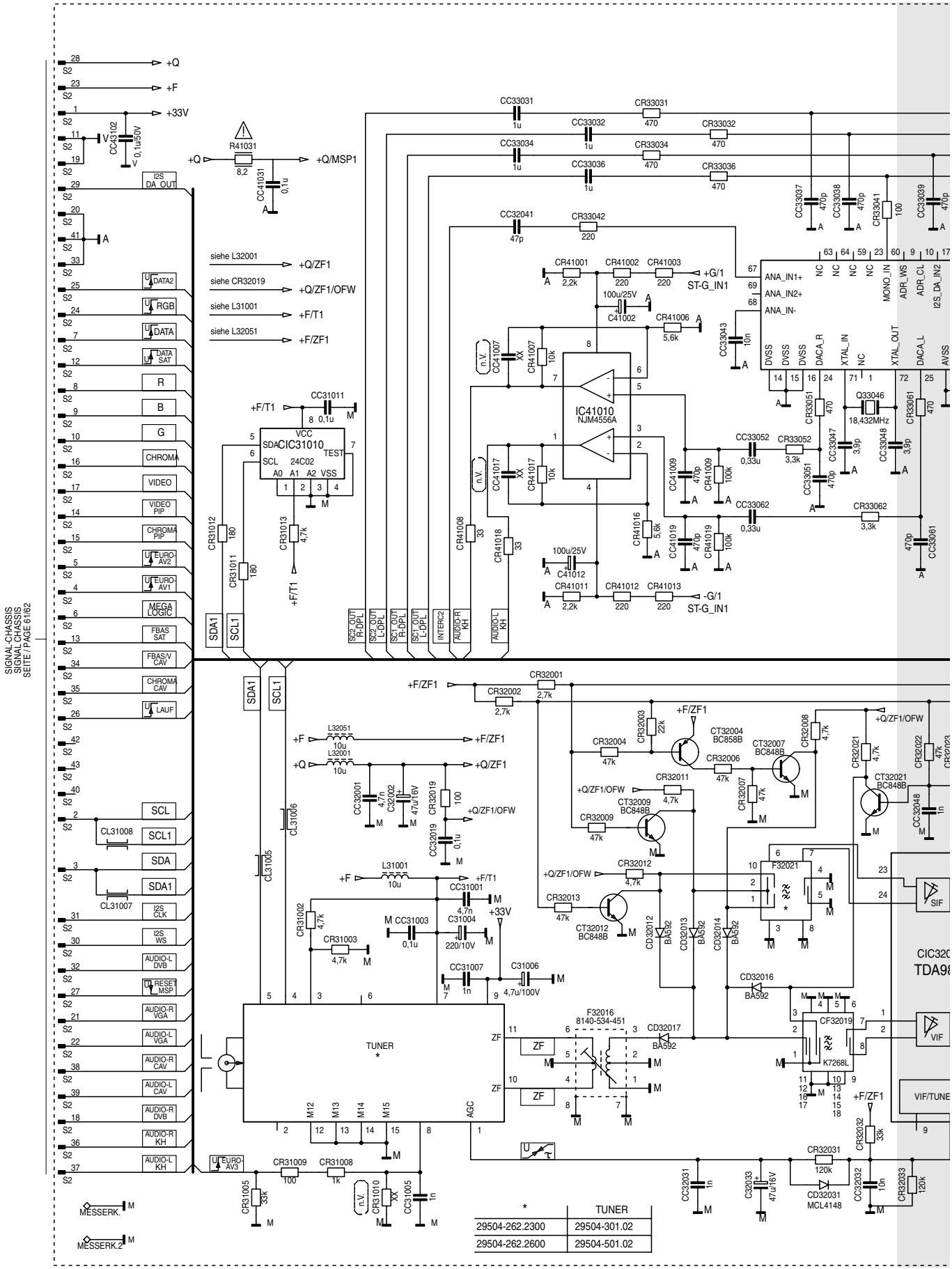
Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

The measured values given in the circuit diagrams are approximates!

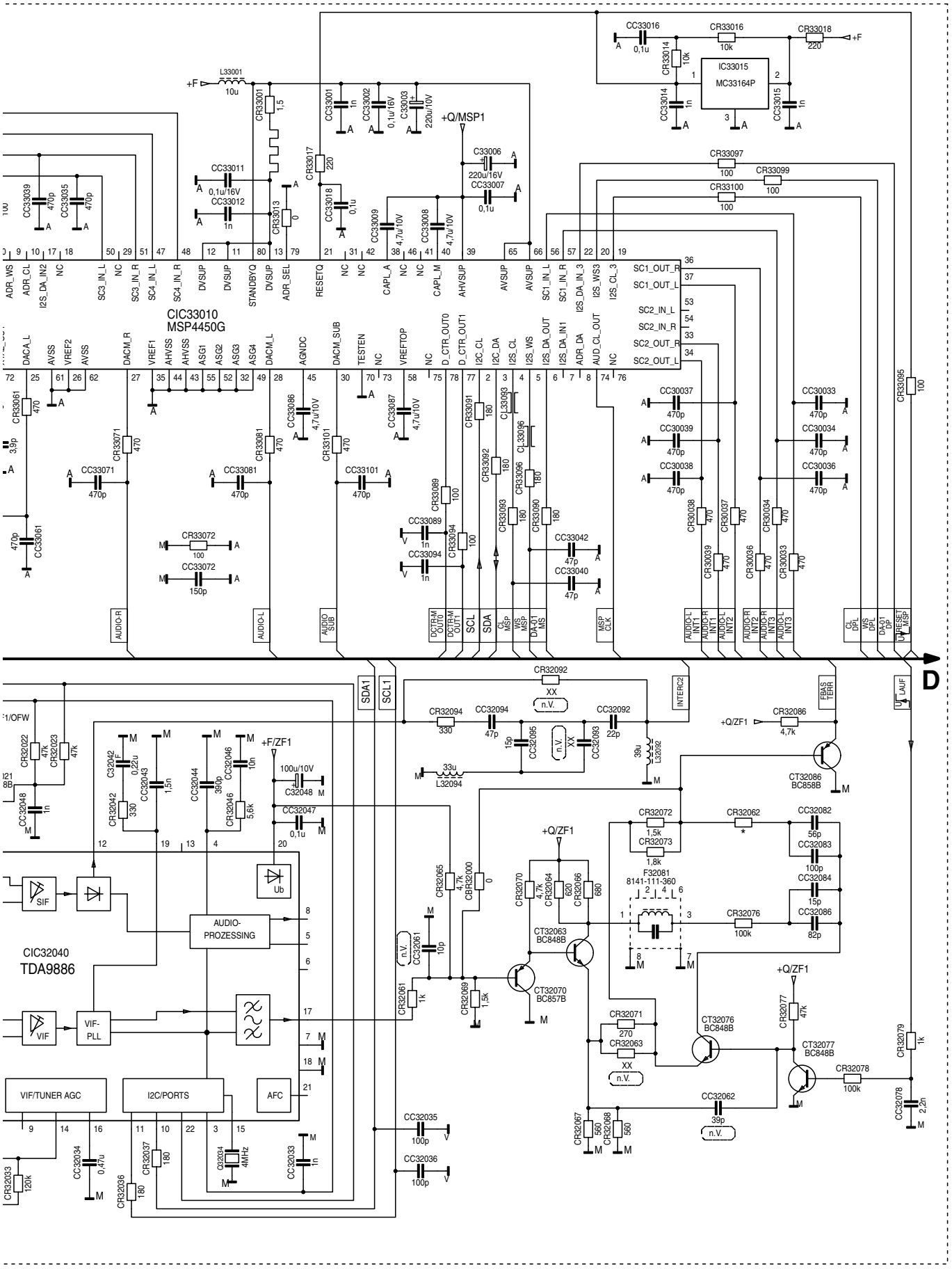
090402

# Signal-Baustein Teil 1 / Signal Module Part 1 295042622300

Platinenabbildungen siehe Seite 35…39
Layout of PCBs see Page 35…39




| * | TUNER |
|---|---|
| 29504-262.2300 | 29504-301.02 |
| 29504-262.2600 | 29504-501.02 |

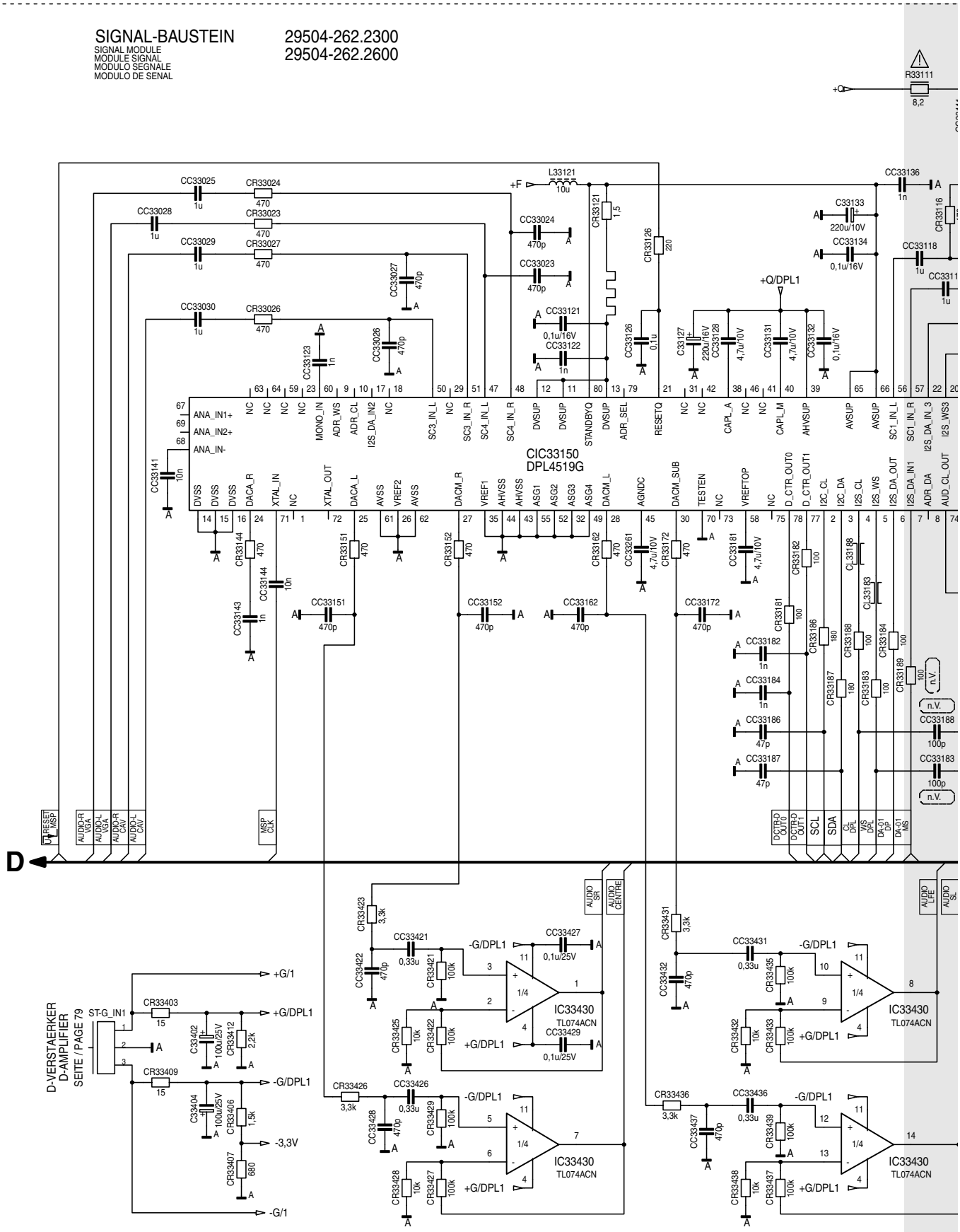

CIC33010
MSP4450G
CIC32040
TDA9886
IC33015
MC33164P
+Q/MSP1
+F/ZF1
+Q/ZF1
SDA1
SCL1
SDA
SCL
D

# Signal-Baustein Teil 2 / Signal Module Part 2 295042622300

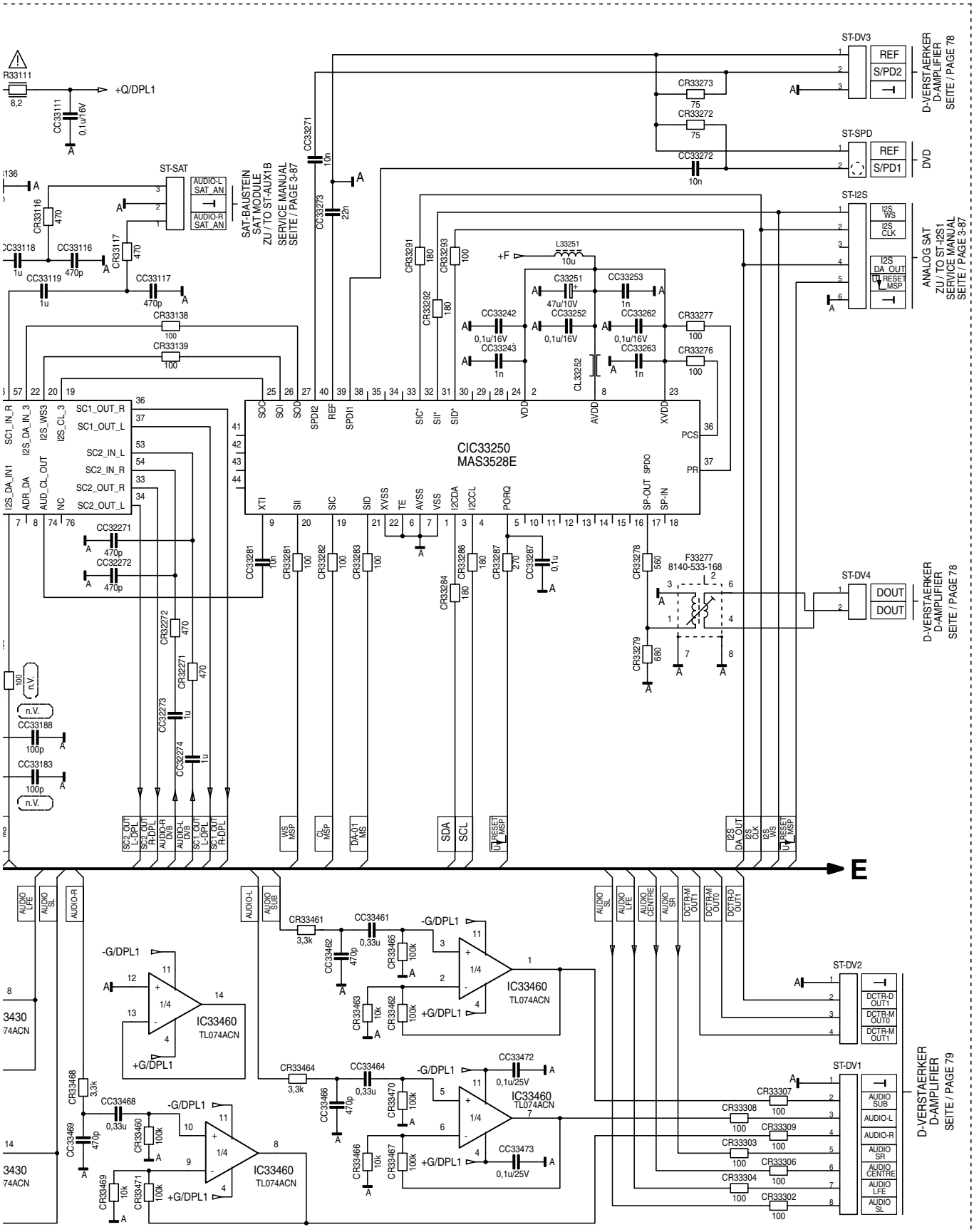
Platinenabbildungen siehe Seite 35…39
Layout of PCBs see Page 35…39

SIGNAL-BAUSTEIN
SIGNAL MODULE
MODULE SIGNAL
MODULO SEGNALE
MODULO DE SENAL

29504-262.2300
29504-262.2600



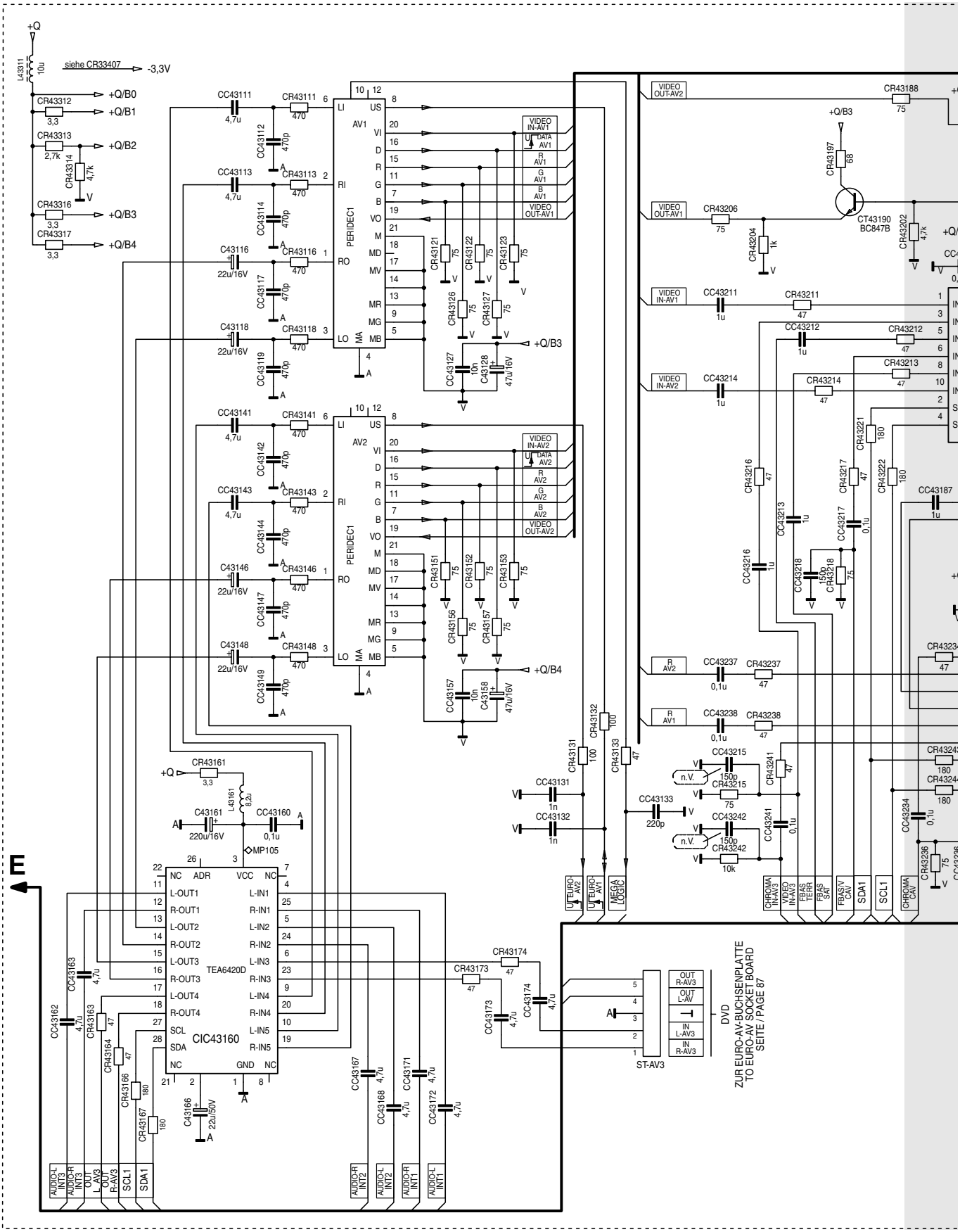

| * | OPTION A | OPTION B | OPTION C | OPTION D | CR31005 | CC31005 | CR31008 | CR31009 | CR31010 | F32016 | CC32017 | CR32017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 202.XX00 | —— | —— | X | —— | —— | —— | —— | —— | 0 | 8141-107-601 | —— | 0 |
| 262.XX00 | X | —— | —— | X | 33k | 1n | 1k | 100 | —— | 8140-534-451 | 1n | —— |
| 262.2300 | X | X | X | X | 33k | 1n | 1k | 100 | —— | 8140-534-451 | 1n | —— |

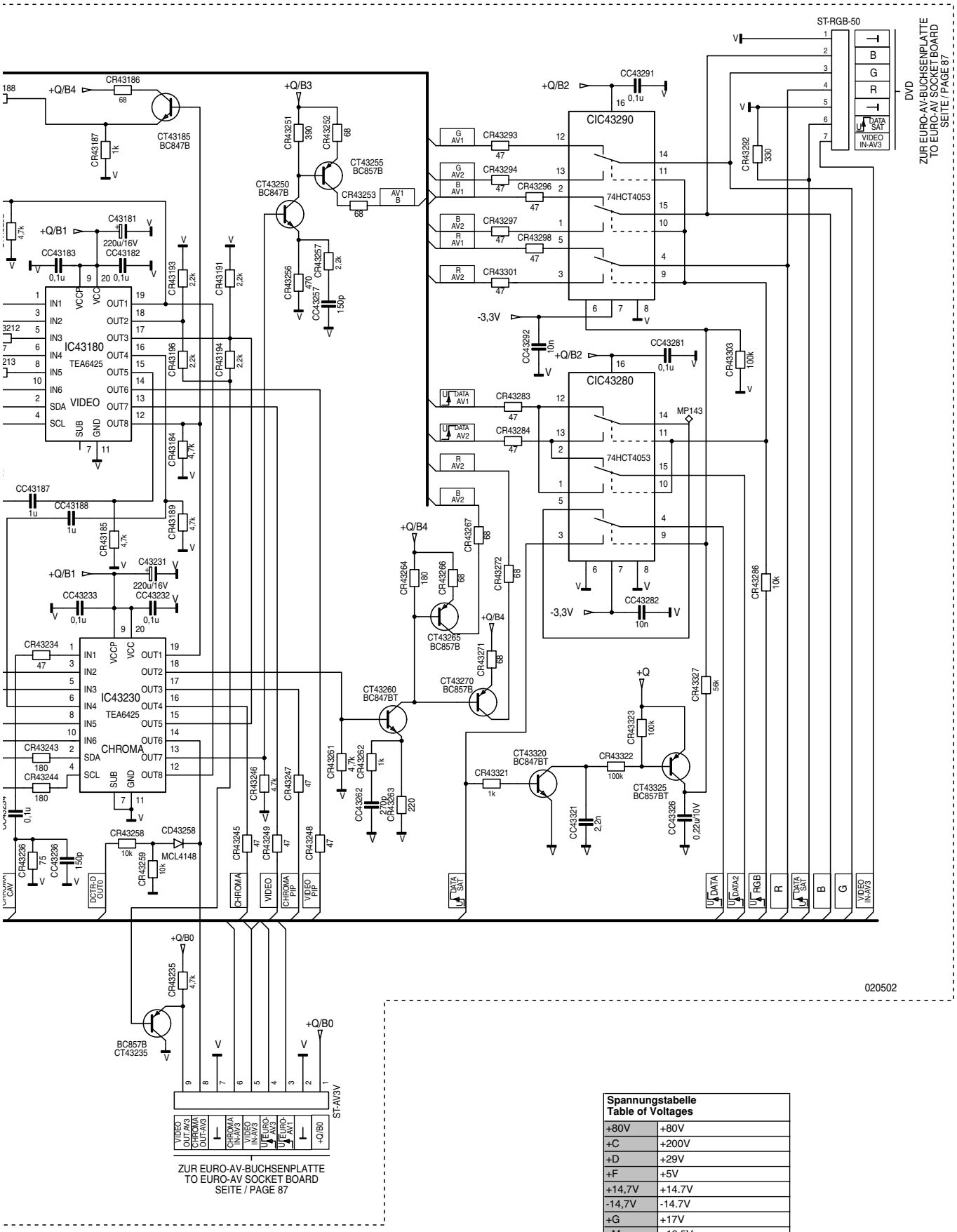



| CR32017 | CR32018 | F32019 | F32021 | CIC32040 | CC32041 | CR32062 | CR32063 | CR32092 | CC32092 | L32092 | CC32093 | CC32094 | CC32095 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | G1985M | —— | TDA9885 | 22p | 0 Ohm | 0 Ohm | —— | 15p | 33u | 39p | 39p | —— |
| —— | 2,2k | K3953M | K4654 | TDA9886 | 47p | —— | 1,8k | 0 Ohm | —— | —— | —— | —— | —— |
| —— | 2,2k | K629K | K4654 | TDA9886 | 47p | —— | 1,8k | —— | 22p | 39u | 47p | 47p | 15p |

# Signal-Baustein Teil 3 / Signal Module Part 3 295042622300

Platinenabbildungen siehe Seite 35…39
Layout of PCBs see Page 35…39






| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT<br>/Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT<br>/Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

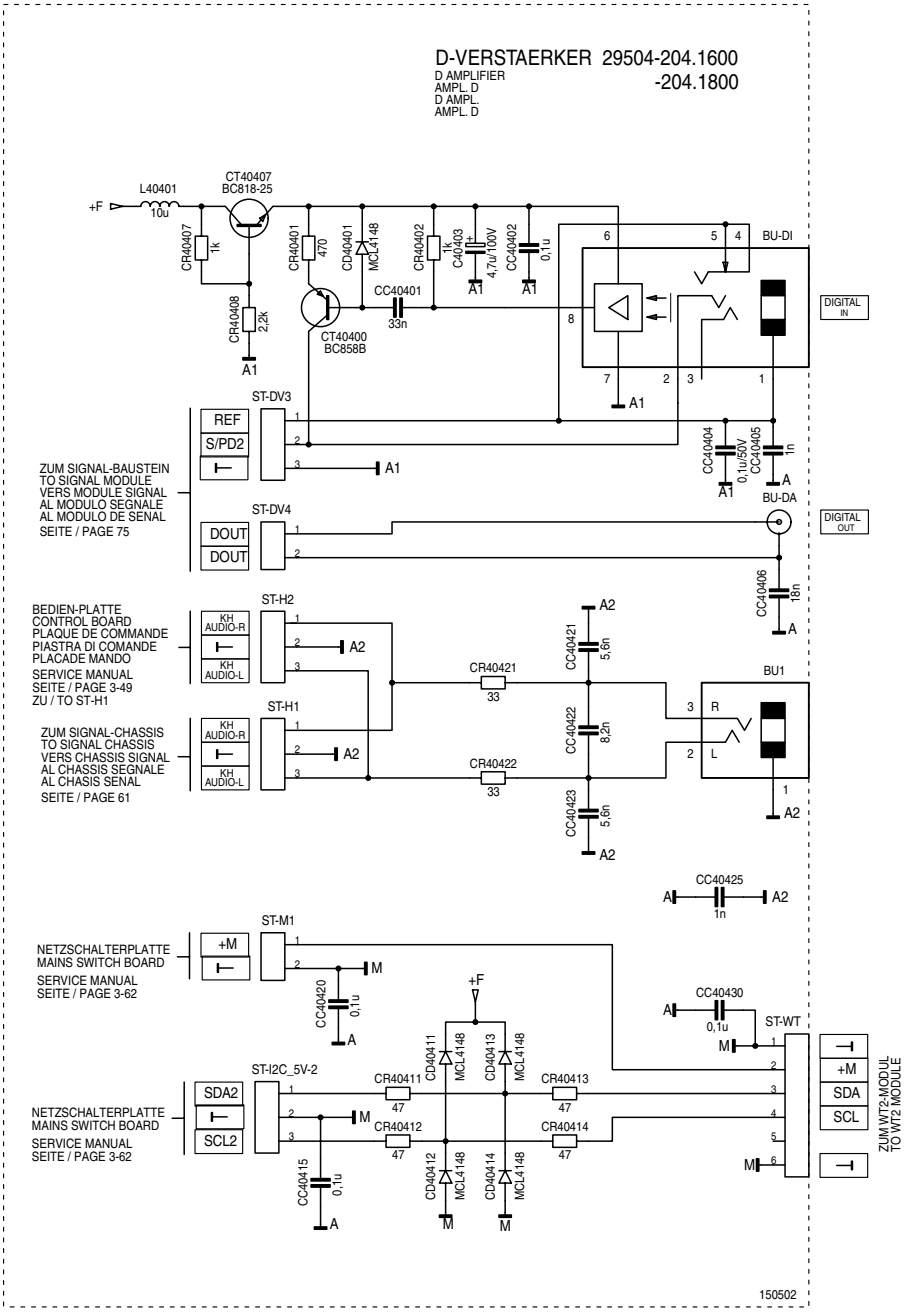
Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

The measured values given in the circuit diagrams are approximates!

# D-Verstärker Teil 1 / D-Amplifier Part 1 295042041600

Platinenabbildungen siehe Seite 40…43
Layout of PCBs see Page 40…43

| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT /Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT /Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

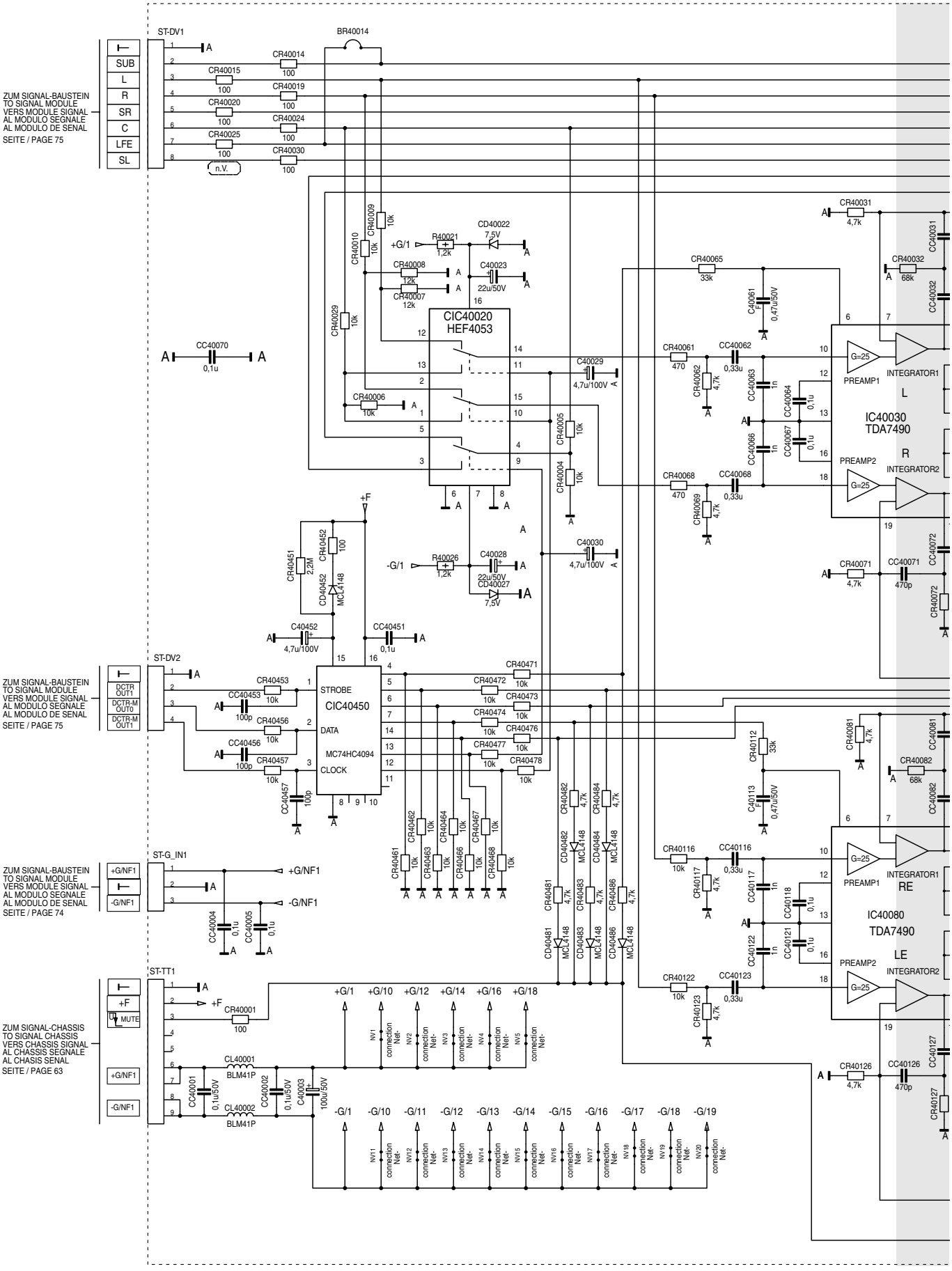


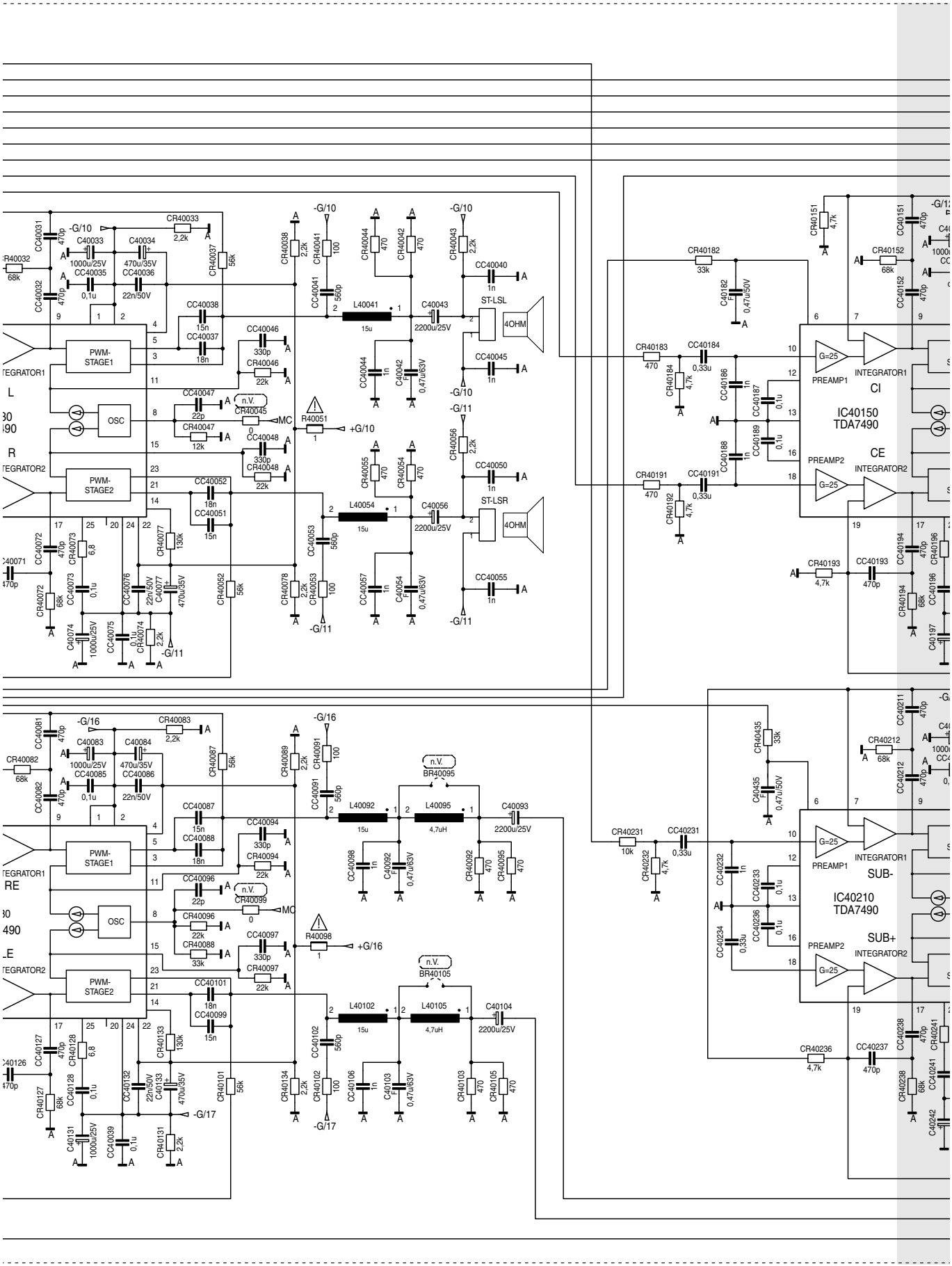

Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

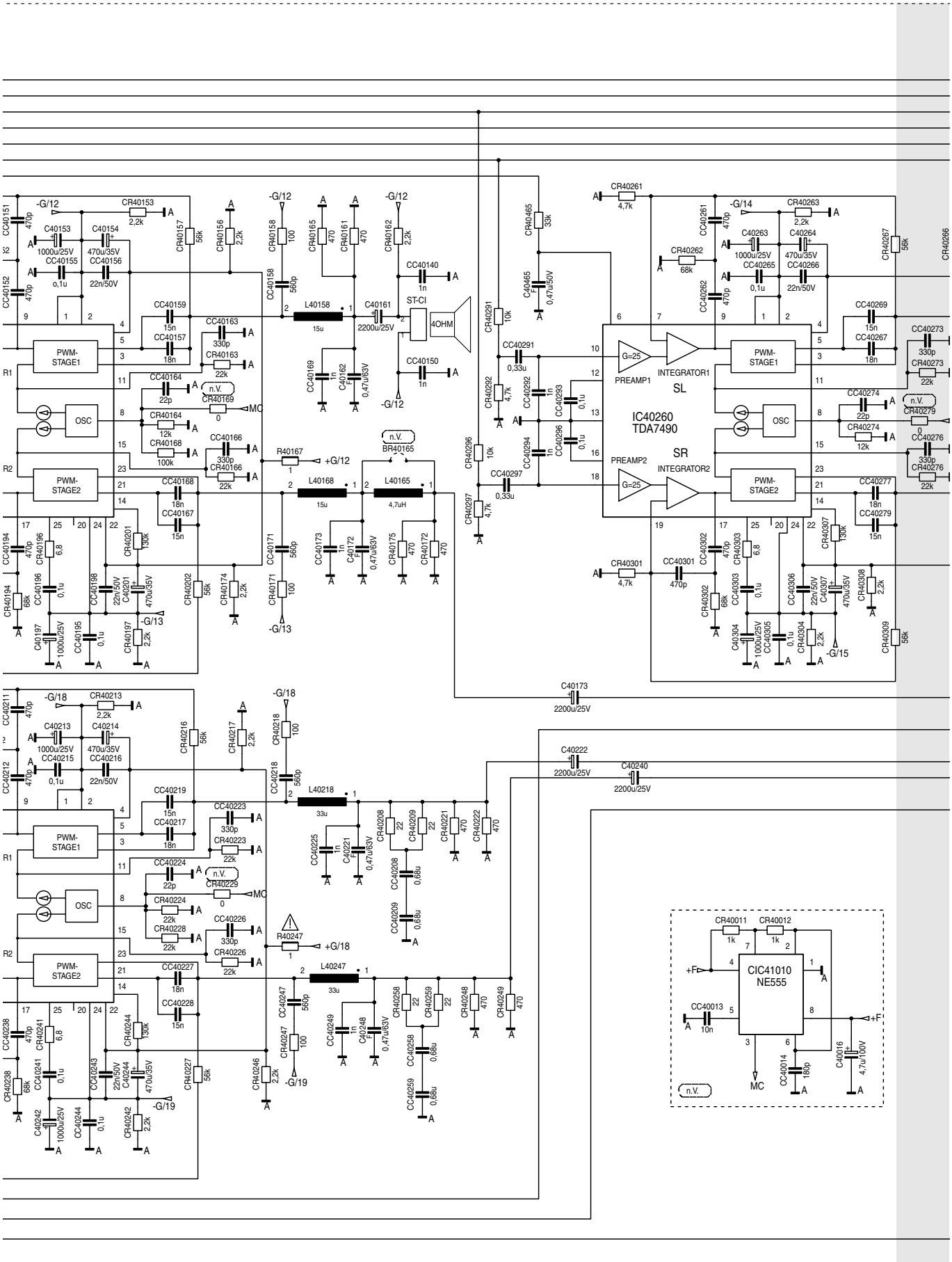
The measured values given in the circuit diagrams are approximates!

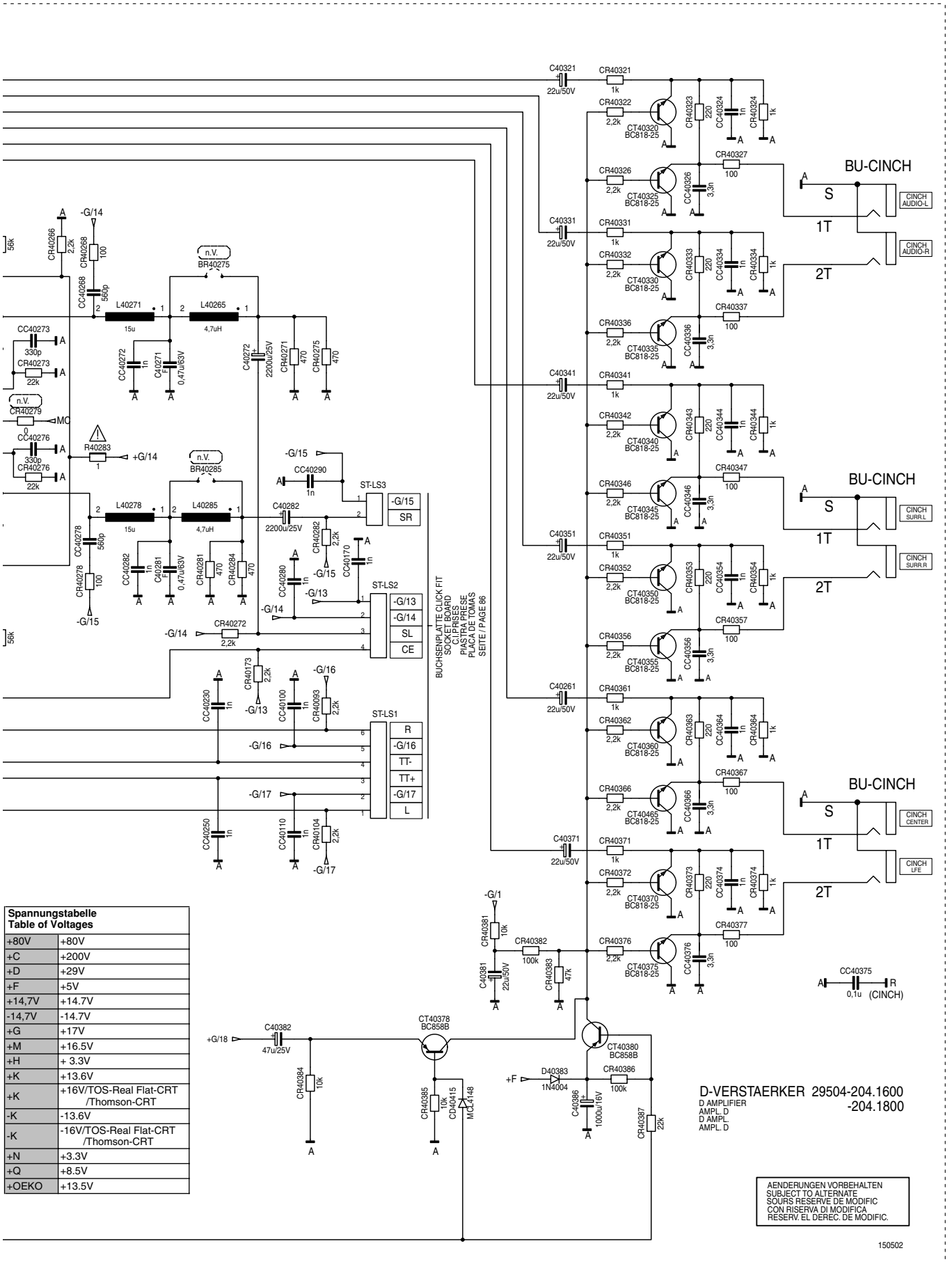
# D-Verstärker Teil 2 / D-Amplifier Part 2 295042041600

Platinenabbildungen siehe Seite 40…43
Layout of PCBs see Page 40…43




PWM-STAGE1
PWM-STAGE2
OSC
PREAMP1
PREAMP2
INTEGRATOR1
INTEGRATOR2
IC40150
TDA7490
IC40210
TDA7490
4OHM
ST-LSL
ST-LSR
n.v.
-G/10
-G/11
-G/16
-G/17
+G/10
+G/16
SUB-
SUB+


IC40260
TDA7490
SL
SR
PREAMP1
PREAMP2
INTEGRATOR1
INTEGRATOR2
G=25
PWM-STAGE1
PWM-STAGE2
OSC
ST-CI
4OHM
CIC41010
NE555
n.V.
MC
-G/12
-G/13
-G/14
-G/15
-G/18
-G/19
+G/12
+G/18
+F




| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT /Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT /Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

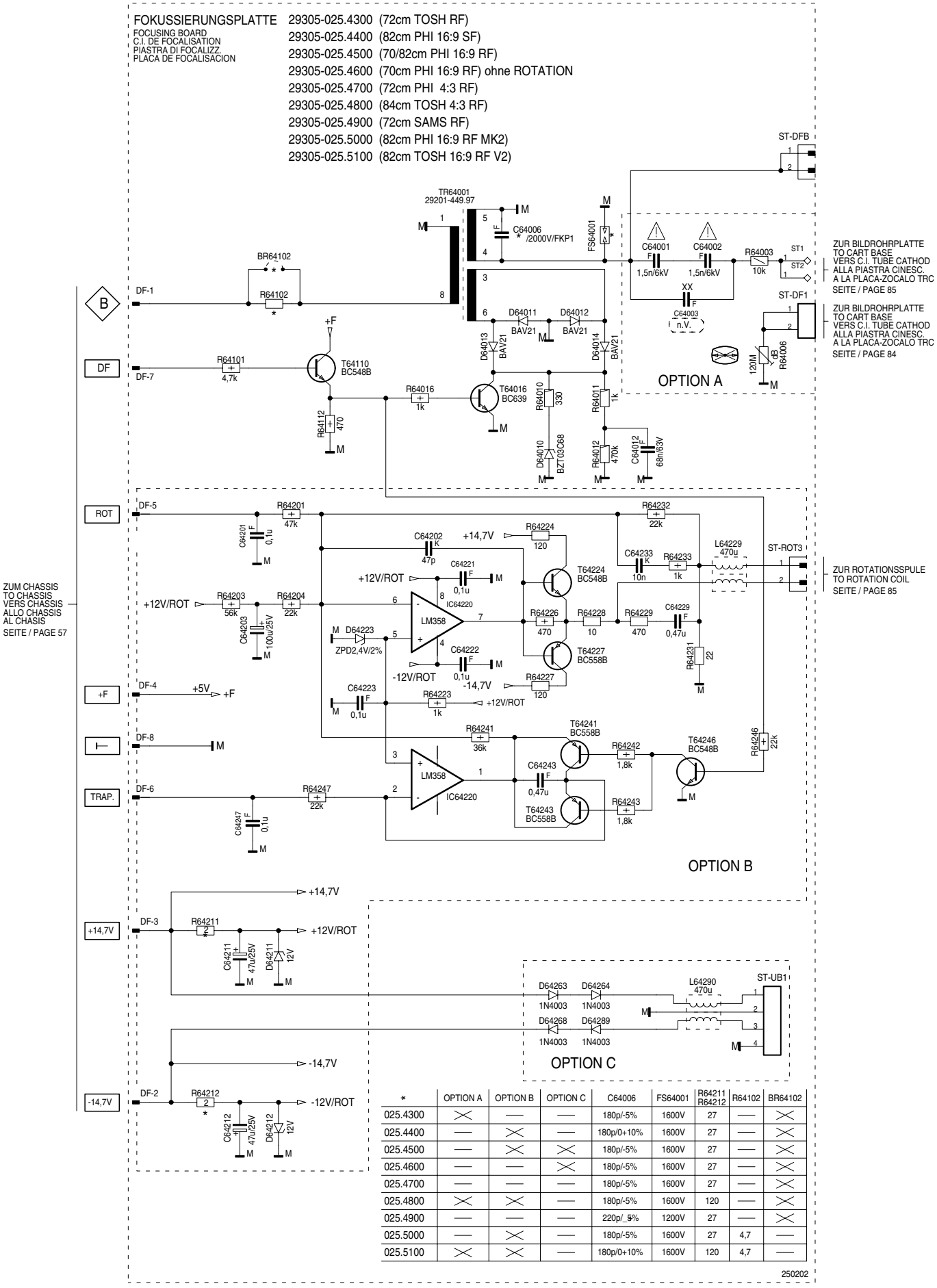
The measured values given in the circuit diagrams are approximates!

# Fokussierungsplatte / Focusing Board 293050255100

Platinenabbildung siehe Seite 46
Layout of PCB see Page 46

FOKUSSIERUNGSPLATTE
FOCUSING BOARD
C.I. DE FOCALISATION
PIASTRA DI FOCALIZZ.
PLACA DE FOCALISACION

29305-025.4300 (72cm TOSH RF)
29305-025.4400 (82cm PHI 16:9 SF)
29305-025.4500 (70/82cm PHI 16:9 RF)
29305-025.4600 (70cm PHI 16:9 RF) ohne ROTATION
29305-025.4700 (72cm PHI 4:3 RF)
29305-025.4800 (84cm TOSH 4:3 RF)
29305-025.4900 (72cm SAMS RF)
29305-025.5000 (82cm PHI 16:9 RF MK2)
29305-025.5100 (82cm TOSH 16:9 RF V2)

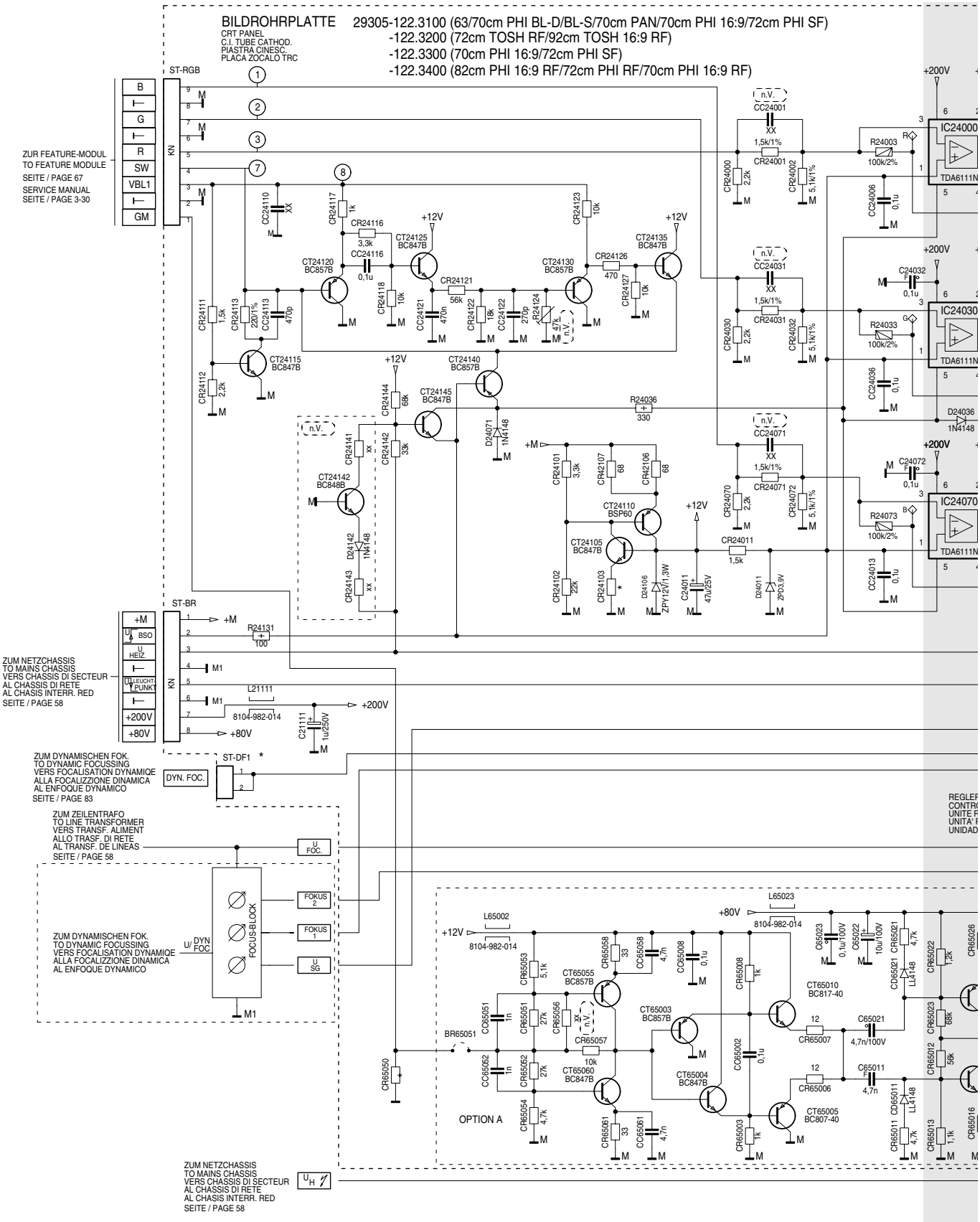


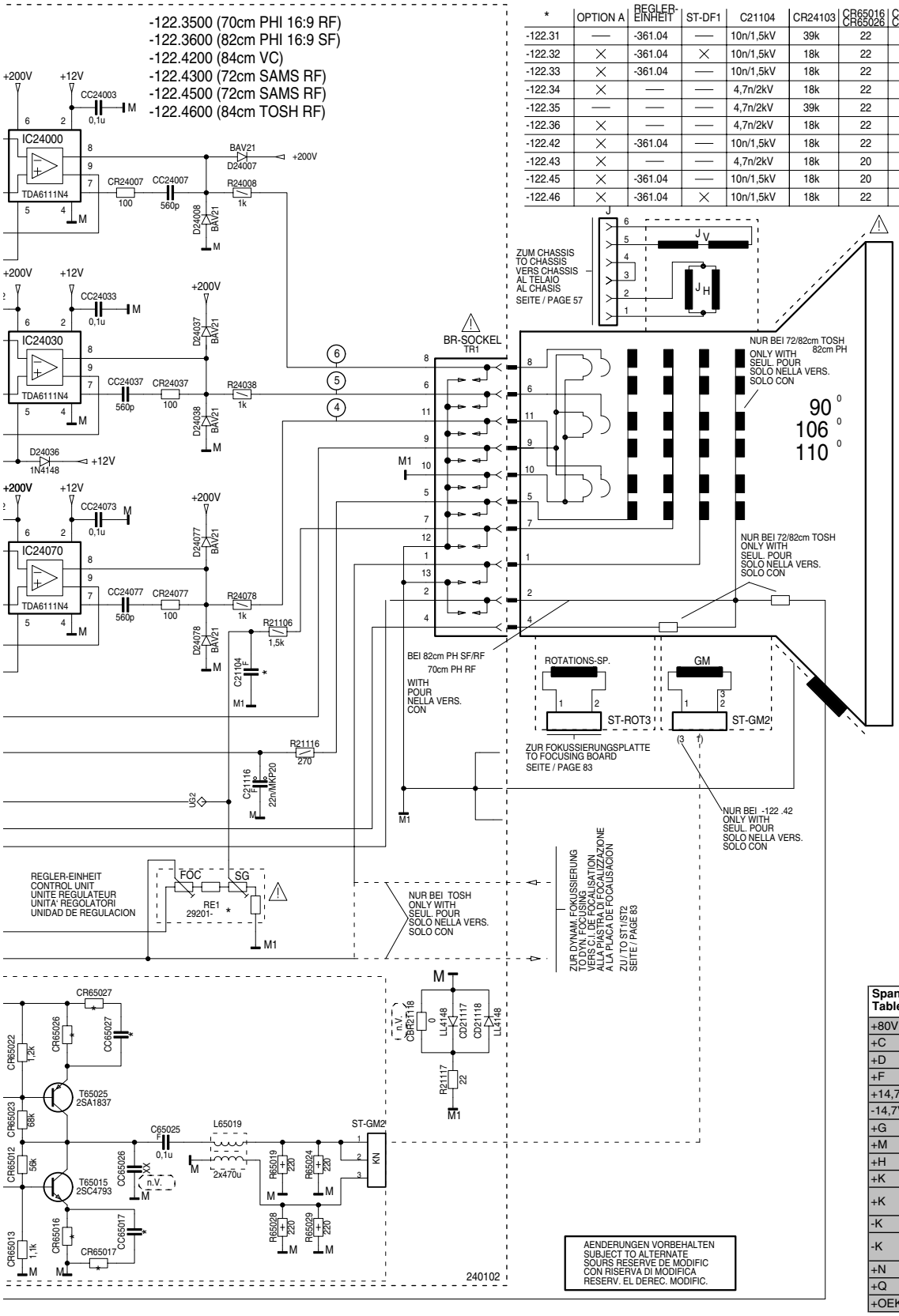

| * | OPTION A | OPTION B | OPTION C | C64006 | FS64001 | R64211 R64212 | R64102 | BR64102 |
|---|---|---|---|---|---|---|---|---|
| 025.4300 | X | — | — | 180p/-5% | 1600V | 27 | — | X |
| 025.4400 | — | X | — | 180p/0+10% | 1600V | 27 | — | X |
| 025.4500 | — | X | X | 180p/-5% | 1600V | 27 | — | X |
| 025.4600 | — | — | X | 180p/-5% | 1600V | 27 | — | X |
| 025.4700 | — | — | — | 180p/-5% | 1600V | 27 | — | X |
| 025.4800 | X | X | — | 180p/-5% | 1600V | 120 | — | X |
| 025.4900 | — | — | — | 220p/-5% | 1200V | 27 | — | X |
| 025.5000 | — | X | — | 180p/-5% | 1600V | 27 | 4,7 | — |
| 025.5100 | X | X | — | 180p/0+10% | 1600V | 120 | 4,7 | — |

250202

# Bildrohrplatte / CRT Panel 293051223200

Oszillogramme und Platinenabbildungen siehe Seite 44…45
Oscillograms and Layout of PCBs see Page 44…45






| * | OPTION A | REGLER-EINHEIT | ST-DF1 | C21104 | CR24103 | CR65016 CR65026 | CC65016 CC65026 | CR65017 CR65027 | R65050 | CC65017 CC65027 |
|---|---|---|---|---|---|---|---|---|---|---|
| -122.31 | — | -361.04 | — | 10n/1,5kV | 39k | 22 | 470p | 33 | 0 | — |
| -122.32 | X | -361.04 | X | 10n/1,5kV | 18k | 22 | 470p | 33 | — | 470p |
| -122.33 | X | -361.04 | — | 10n/1,5kV | 18k | 22 | 470p | 33 | — | 470p |
| -122.34 | X | — | — | 4,7n/2kV | 18k | 22 | 470p | 33 | — | 470p |
| -122.35 | — | — | — | 4,7n/2kV | 39k | 22 | 470p | 33 | 0 | 470p |
| -122.36 | X | — | — | 4,7n/2kV | 18k | 22 | 470p | 33 | — | 470p |
| -122.42 | X | -361.04 | — | 10n/1,5kV | 18k | 22 | 470p | 33 | — | 470p |
| -122.43 | X | — | — | 4,7n/2kV | 18k | 20 | 3,3n | 12 | — | 3,3n |
| -122.45 | X | -361.04 | — | 10n/1,5kV | 18k | 20 | 3,3n | 12 | — | 3,3n |
| -122.46 | X | -361.04 | X | 10n/1,5kV | 18k | 22 | 470p | 33 | — | 470p |

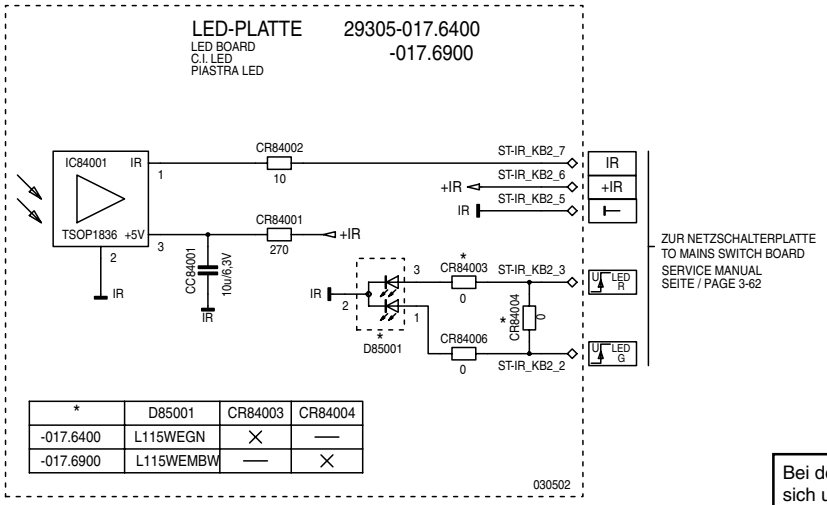
| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT /Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT /Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

The measured values given in the circuit diagrams are approximates!

## LED-Platte / LED Board 293050176400

Platinenabbildungen siehe Seite 47
Layout of PCBs see Page 47




| * | D85001 | CR84003 | CR84004 |
|---|---|---|---|
| -017.6400 | L115WEGN | X | — |
| -017.6900 | L115WEMBW | — | X |

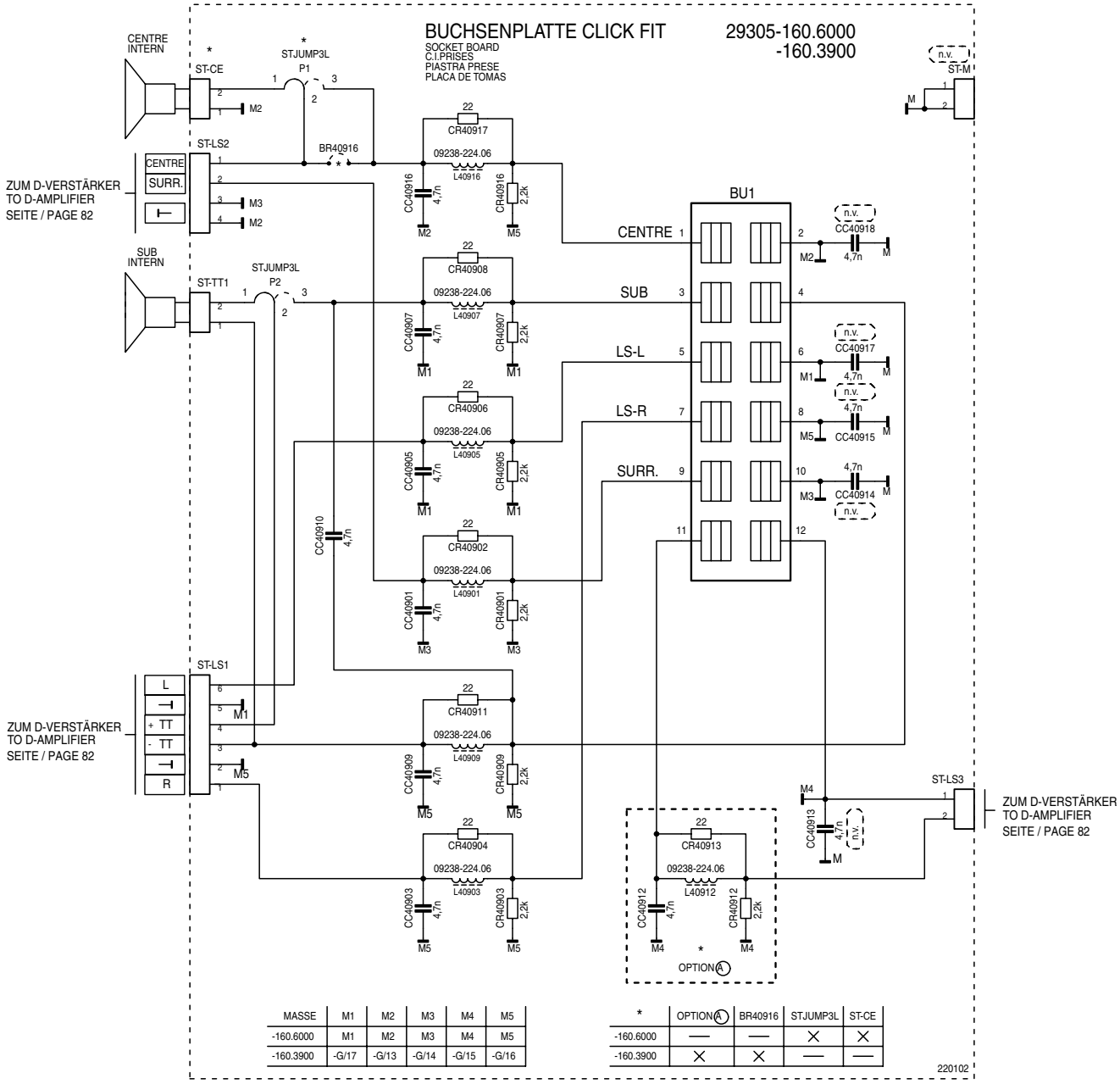
| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT /Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT /Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

The measured values given in the circuit diagrams are approximates!

## Buchsenplatte Click-Fit / Socket Board Click-Fit 293051603900

Platinenabbildungen siehe Seite 47
Layout of PCBs see Page 47

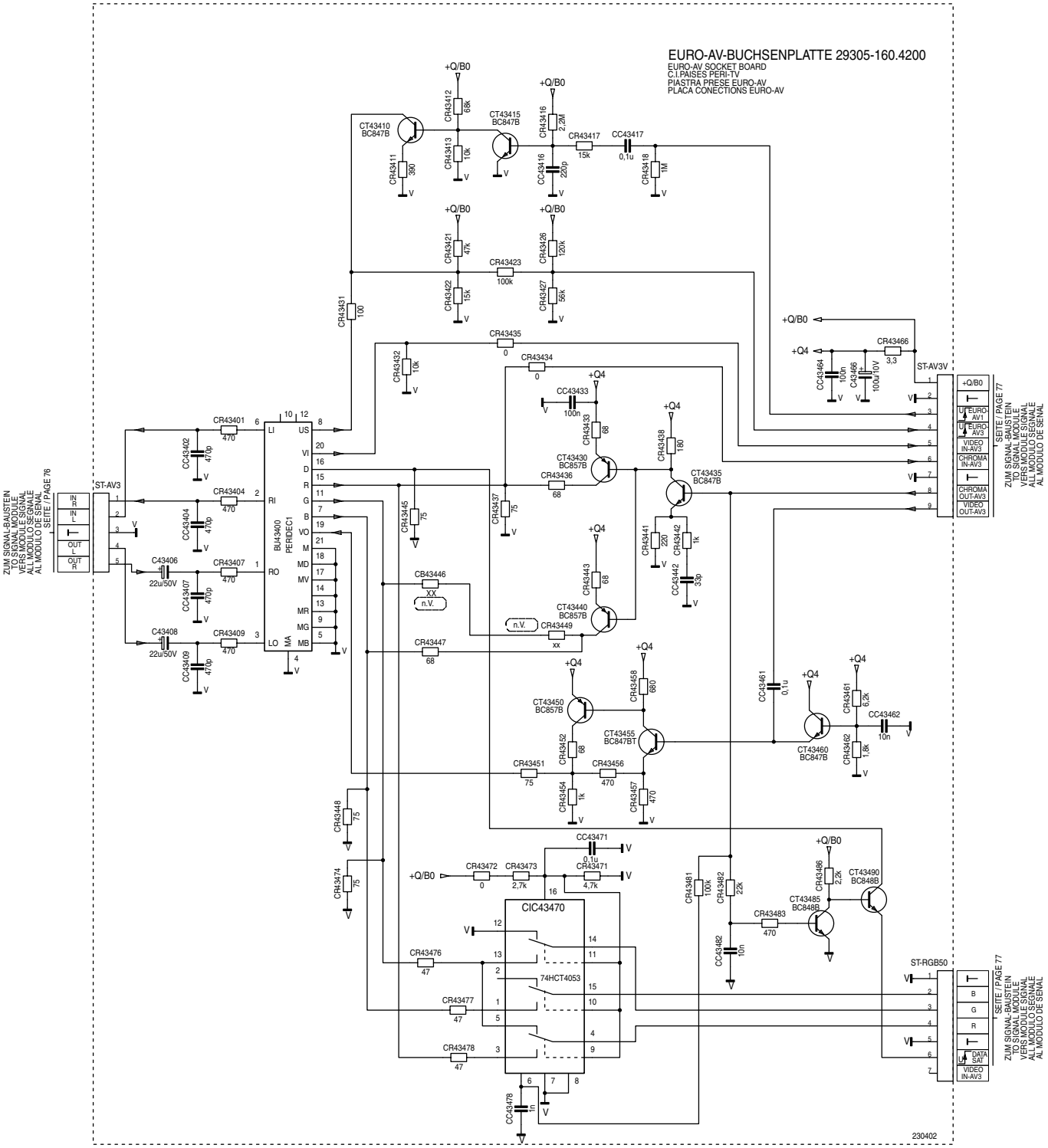



| MASSE | M1 | M2 | M3 | M4 | M5 |
|---|---|---|---|---|---|
| -160.6000 | M1 | M2 | M3 | M4 | M5 |
| -160.3900 | -G/17 | -G/13 | -G/14 | -G/15 | -G/16 |

| * | OPTION A | BR40916 | STJUMP3L | ST-CE |
|---|---|---|---|---|
| -160.6000 | — | — | X | X |
| -160.3900 | X | X | — | — |

# EURO-AV-Buchsenplatte / EURO-AV Socket Board 293051604200

Platinenabbildungen siehe Seite 48
Layout of PCBs see Page 48




| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT /Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT /Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

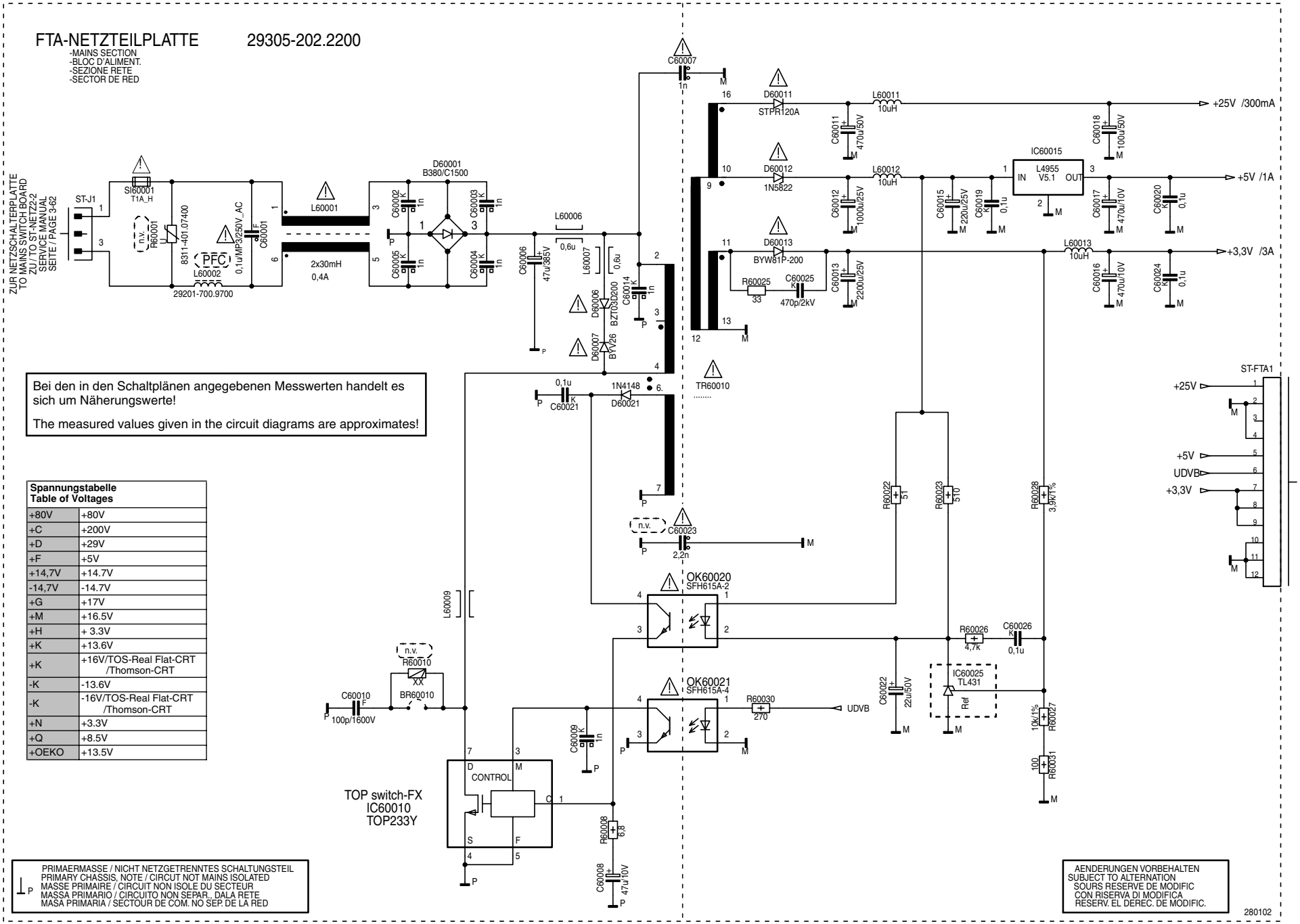
Bei den in den Schaltplänen angegebenen Messwerten handelt es sich um Näherungswerte!

The measured values given in the circuit diagrams are approximates!

# FTA-Netzteilplatte / FTA Mains Section Board 29305202200

Platinenabbildung siehe Seite 49
Layout of PCB see Page 49

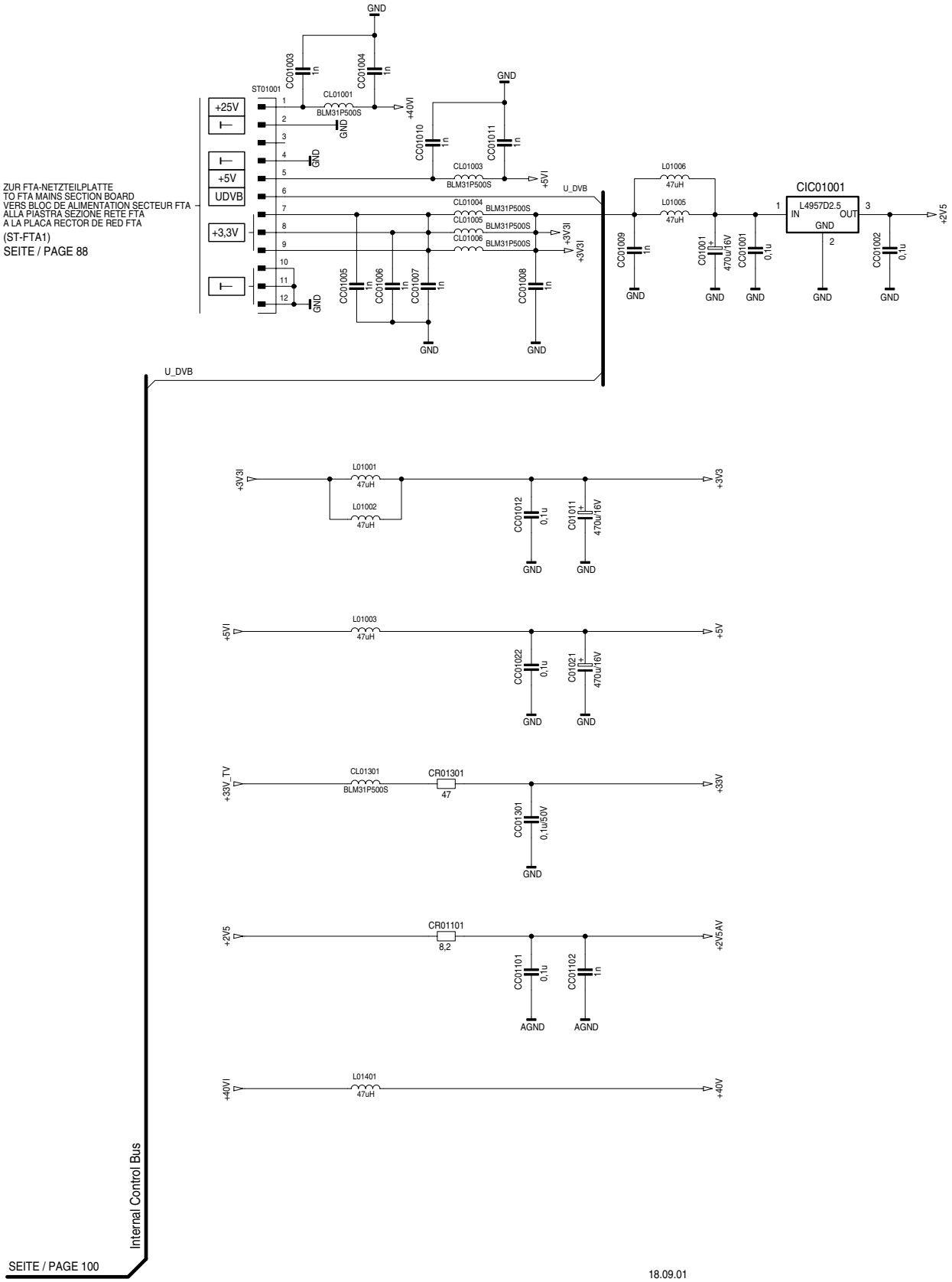





| Spannungstabelle<br>Table of Voltages | |
|---|---|
| +80V | +80V |
| +C | +200V |
| +D | +29V |
| +F | +5V |
| +14,7V | +14.7V |
| -14,7V | -14.7V |
| +G | +17V |
| +M | +16.5V |
| +H | + 3.3V |
| +K | +13.6V |
| +K | +16V/TOS-Real Flat-CRT /Thomson-CRT |
| -K | -13.6V |
| -K | -16V/TOS-Real Flat-CRT /Thomson-CRT |
| +N | +3.3V |
| +Q | +8.5V |
| +OEKO | +13.5V |

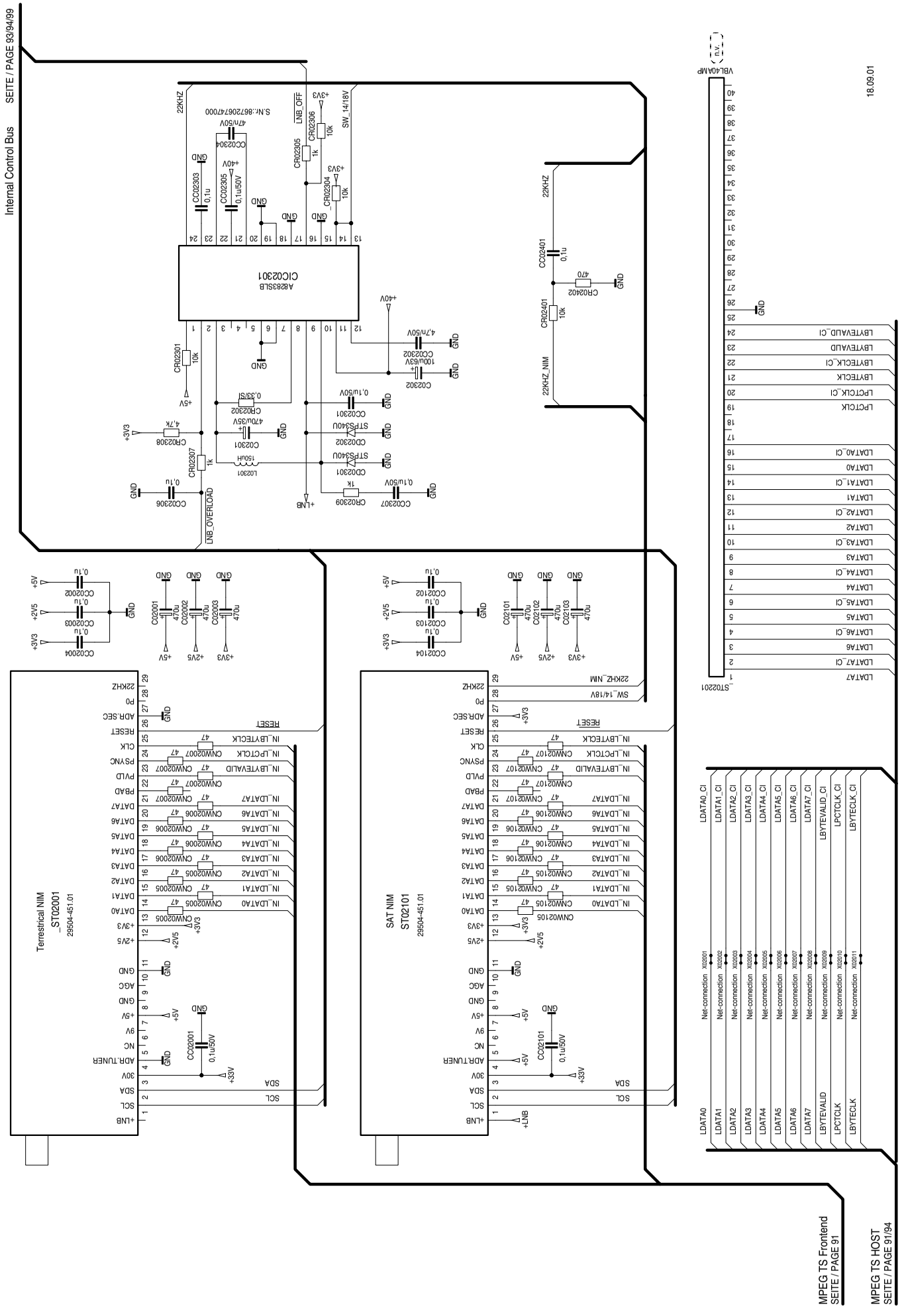
# FTA-Modul Teil 1 / FTA Module Part 1 295041066100

Platinenabbildungen siehe Seite 50…54
Layout of PCBs see Page 50…54



# FTA-Modul Teil 2 / FTA Module Part 2 295041066100

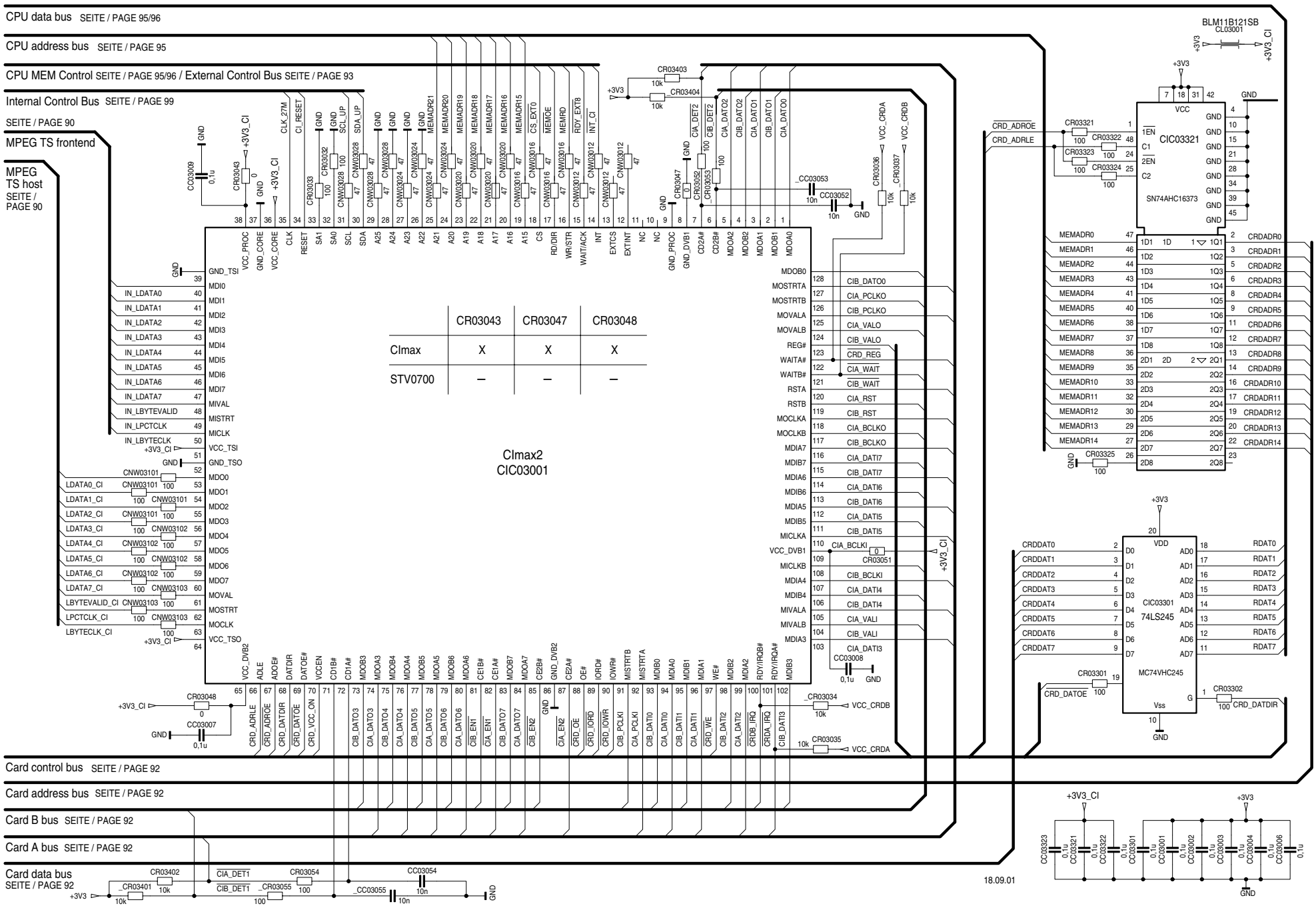
Platinenabbildungen siehe Seite 50…54
Layout of PCBs see Page 50…54



# FTA-Modul Teil 3 / FTA Module Part 3 29504106100

Platinenabbildungen siehe Seite 50...54
Layout of PCBs see Page 50...54

*Platinenabbildungen und Schaltpläne / Layout of PCBs and Circuit Diagrams*


CPU data bus SEITE / PAGE 95/96
CPU address bus SEITE / PAGE 95
CPU MEM Control SEITE / PAGE 95/96 / External Control Bus SEITE / PAGE 93
Internal Control Bus SEITE / PAGE 99
SEITE / PAGE 90
MPEG TS frontend
MPEG TS host SEITE / PAGE 90
CImax2 CIC03001
CR03043 CR03047 CR03048
CImax X X X
STV0700 – – –
BLM11B121SB CL03001
CIC03321
SN74AHC16373
CIC03301
74LS245
MC74VHC245
Card control bus SEITE / PAGE 92
Card address bus SEITE / PAGE 92
Card B bus SEITE / PAGE 92
Card A bus SEITE / PAGE 92
Card data bus SEITE / PAGE 92
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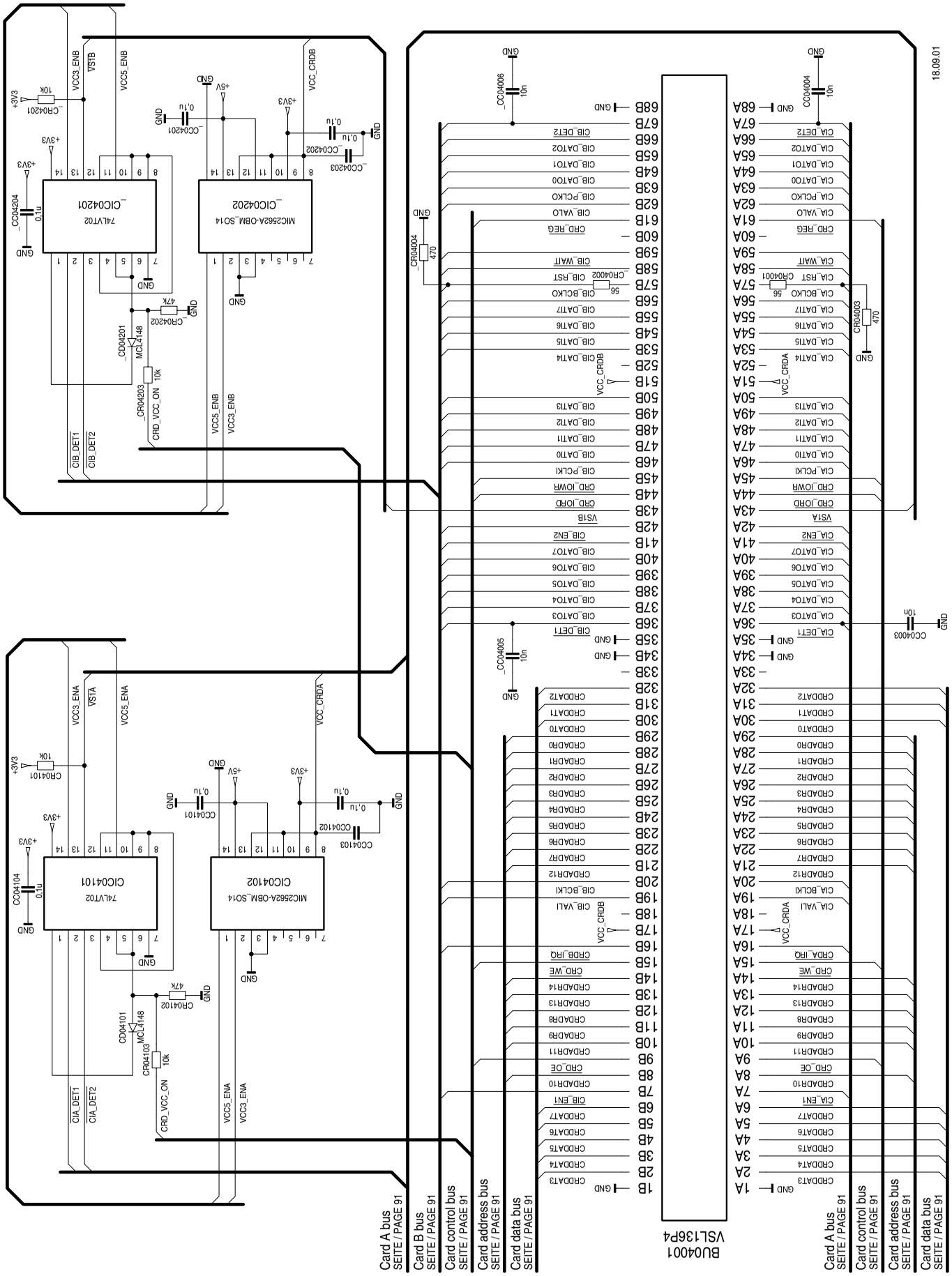
# FTA-Modul Teil 4 / FTA Module Part 4 295041066100

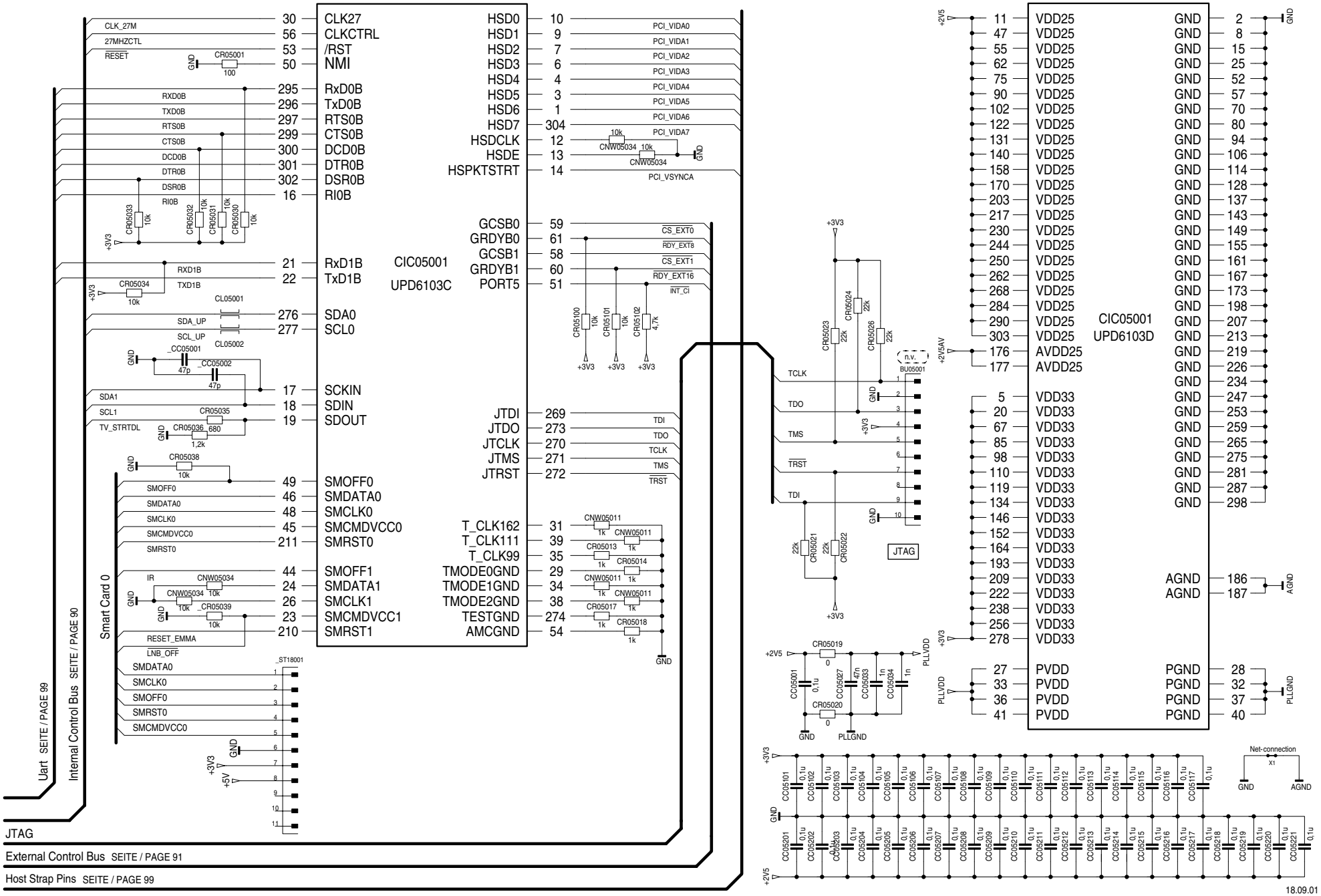
Platinenabbildungen siehe Seite 50…54
Layout of PCBs see Page 50…54



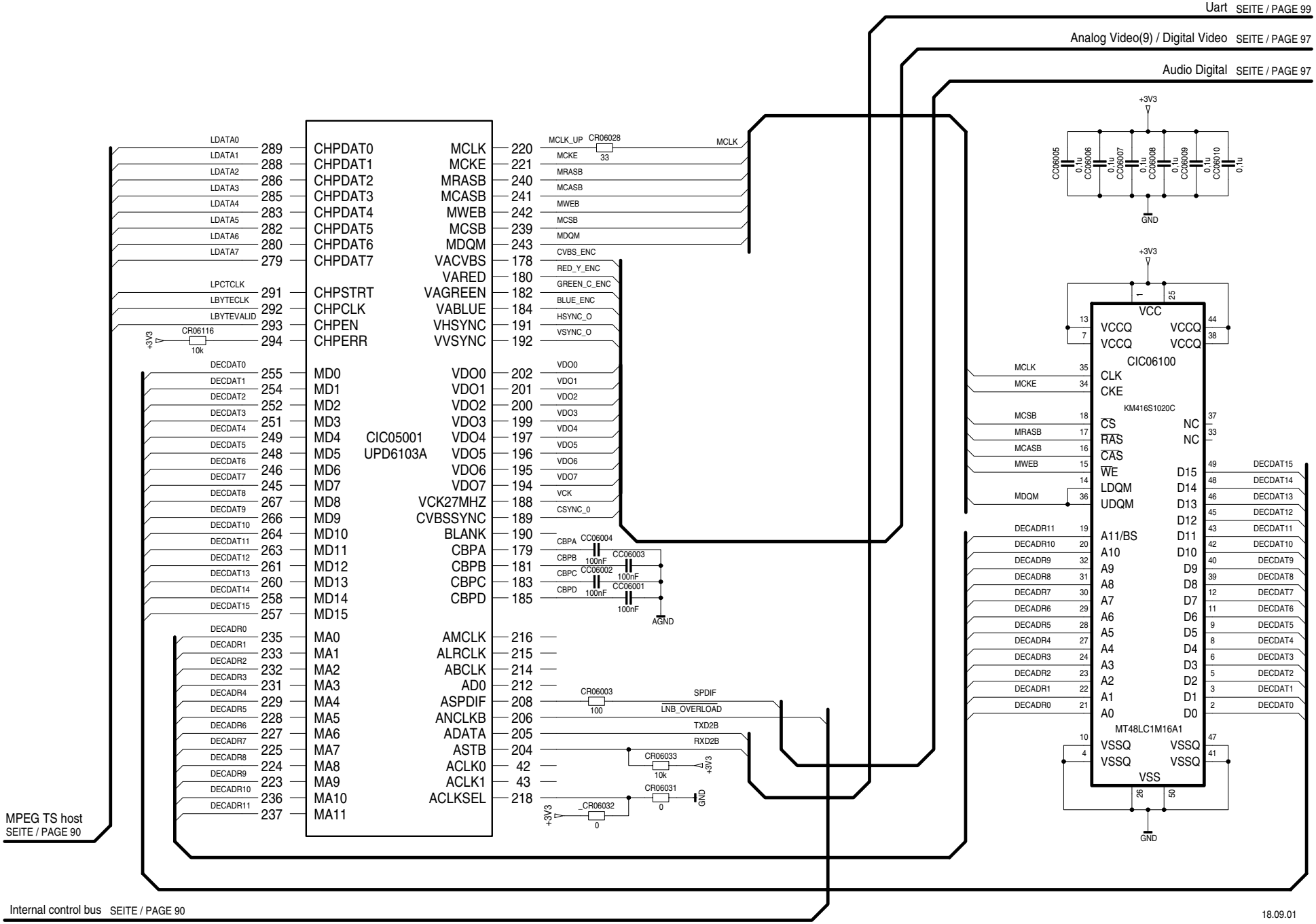
# FTA-Modul Teil 5 / FTA Module Part 5 29504106100

Platinenabbildungen siehe Seite 50...54
Layout of PCBs see Page 50...54





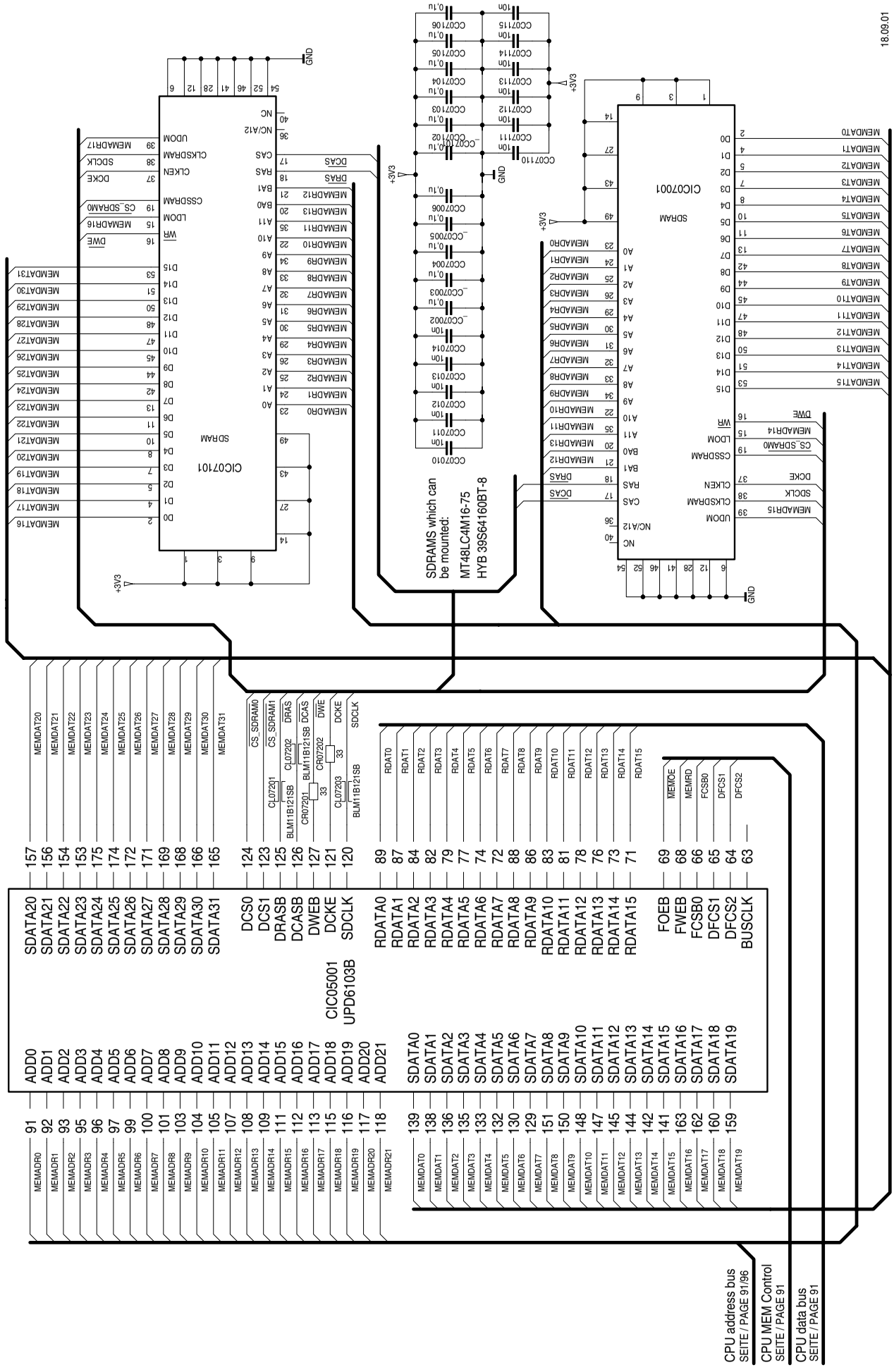
# FTA-Modul Teil 6 / FTA Module Part 6 29504106100




Platinenabbildungen siehe Seite 50...54
Layout of PCBs see Page 50...54

# FTA-Modul Teil 7 / FTA Module Part 7 295041066100

Platinenabbildungen siehe Seite 50…54
Layout of PCBs see Page 50…54



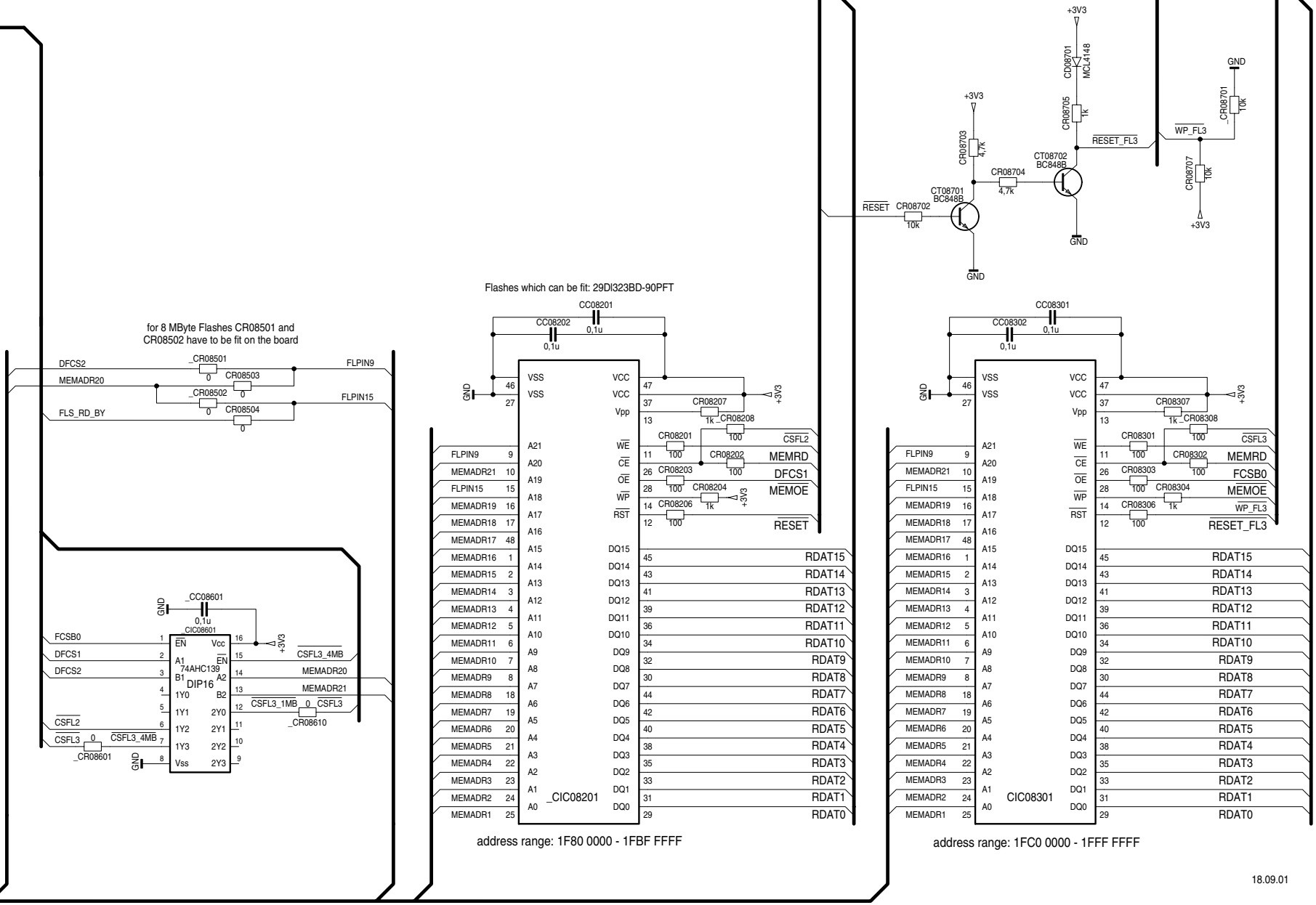
# FTA-Modul Teil 8 / FTA Module Part 8 2950410661 00

Platinenabbildungen siehe Seite 50...54
Layout of PCBs see Page 50...54

CPU memory control

CPU data bus SEITE / PAGE 91

CPU MEM Control
SEITE / PAGE 91

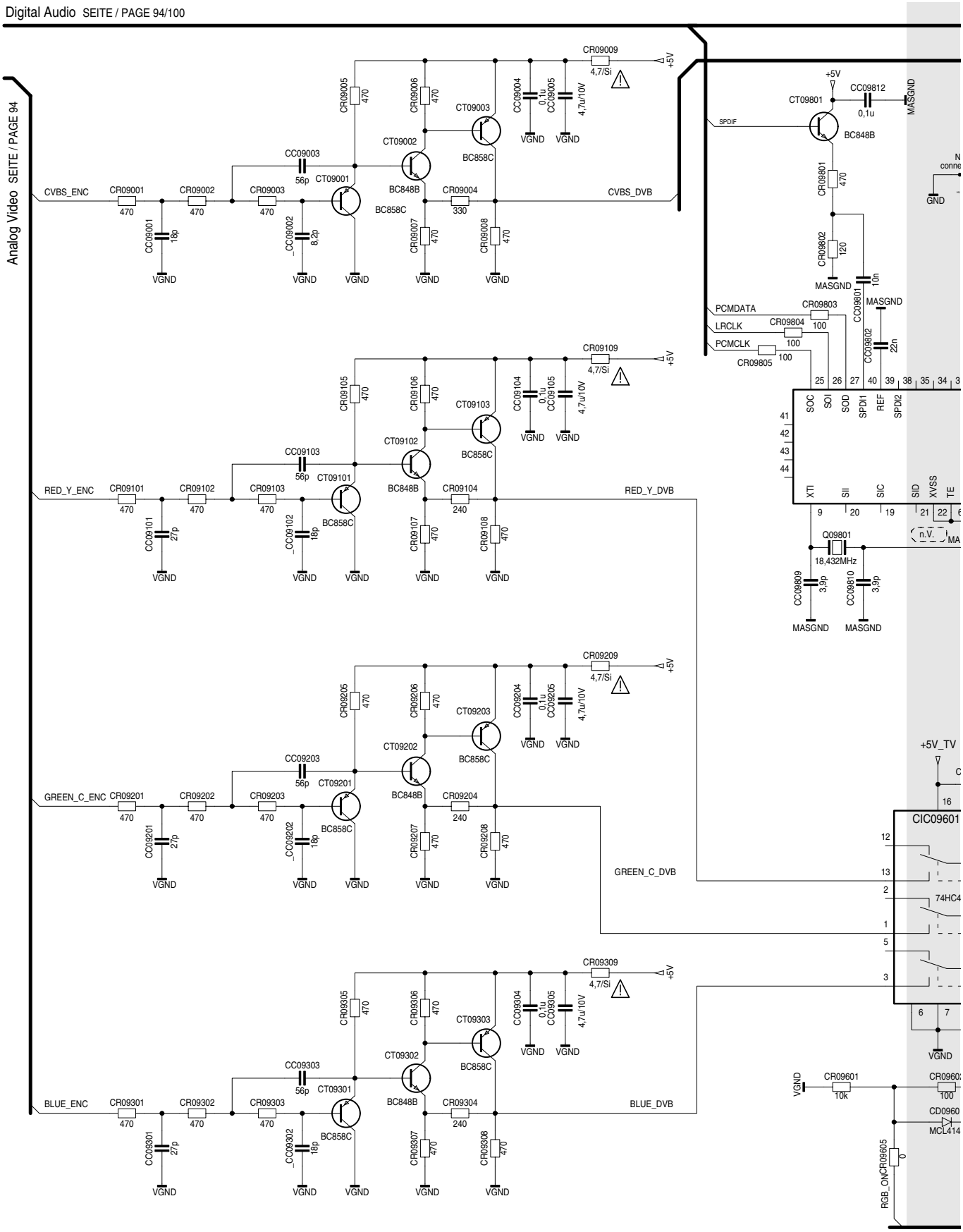


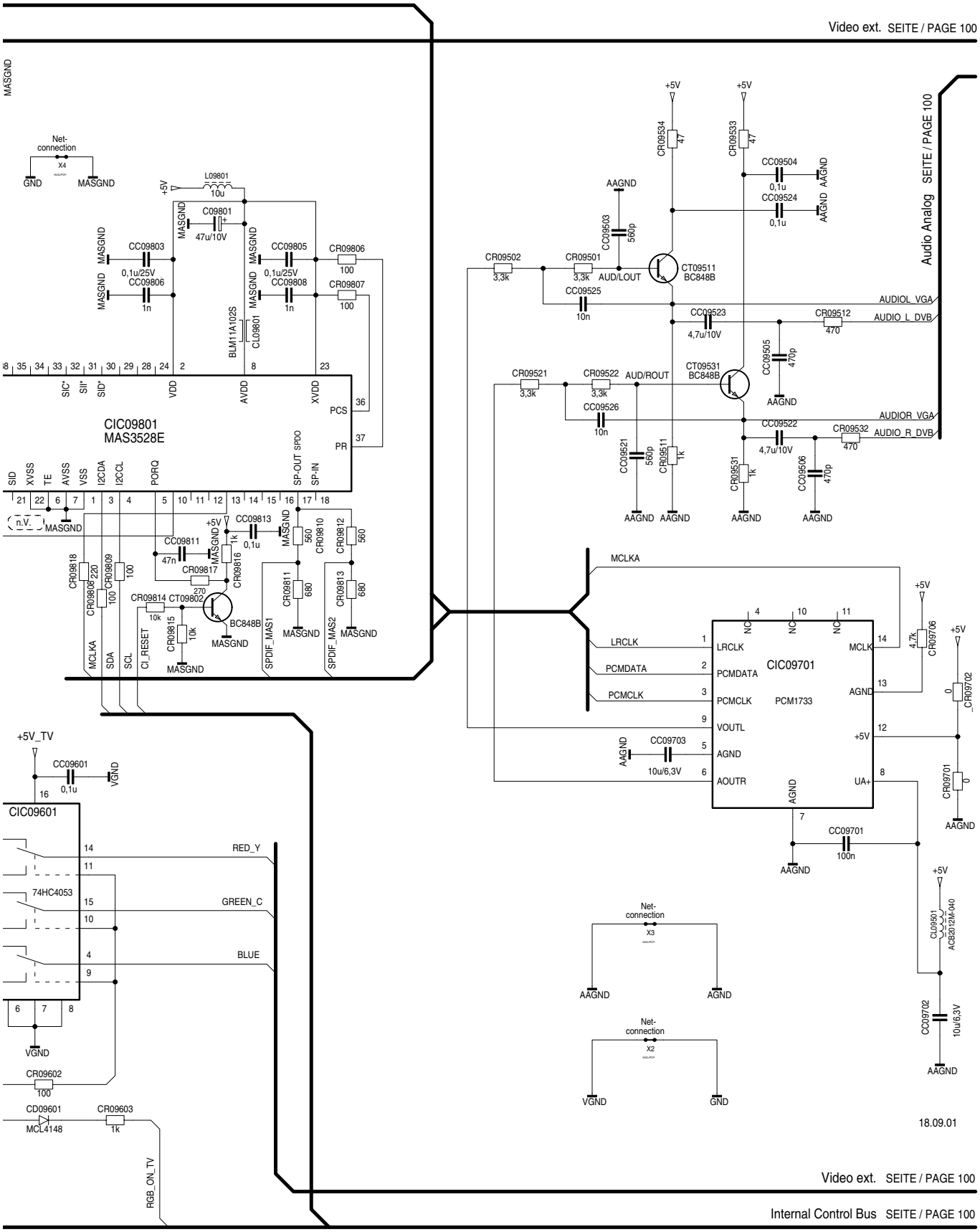

CPU address bus
SEITE / PAGE 95

# FTA-Modul Teil 9 / FTA Module Part 9 295041066100

Platinenabbildungen siehe Seite 50…54
Layout of PCBs see Page 50…54

Digital Audio SEITE / PAGE 94/100




Video ext. SEITE / PAGE 100
Audio Analog SEITE / PAGE 100
CIC09801
MAS3528E
CIC09701
PCM1733
CIC09601
74HC4053
Net-connection
AUD/LOUT
AUD/ROUT
AUDIOL_VGA
AUDIO_L_DVB
AUDIOR_VGA
AUDIO_R_DVB
MCLKA
LRCLK
PCMDATA
PCMCLK
RED_Y
GREEN_C
BLUE
RGB_ON_TV
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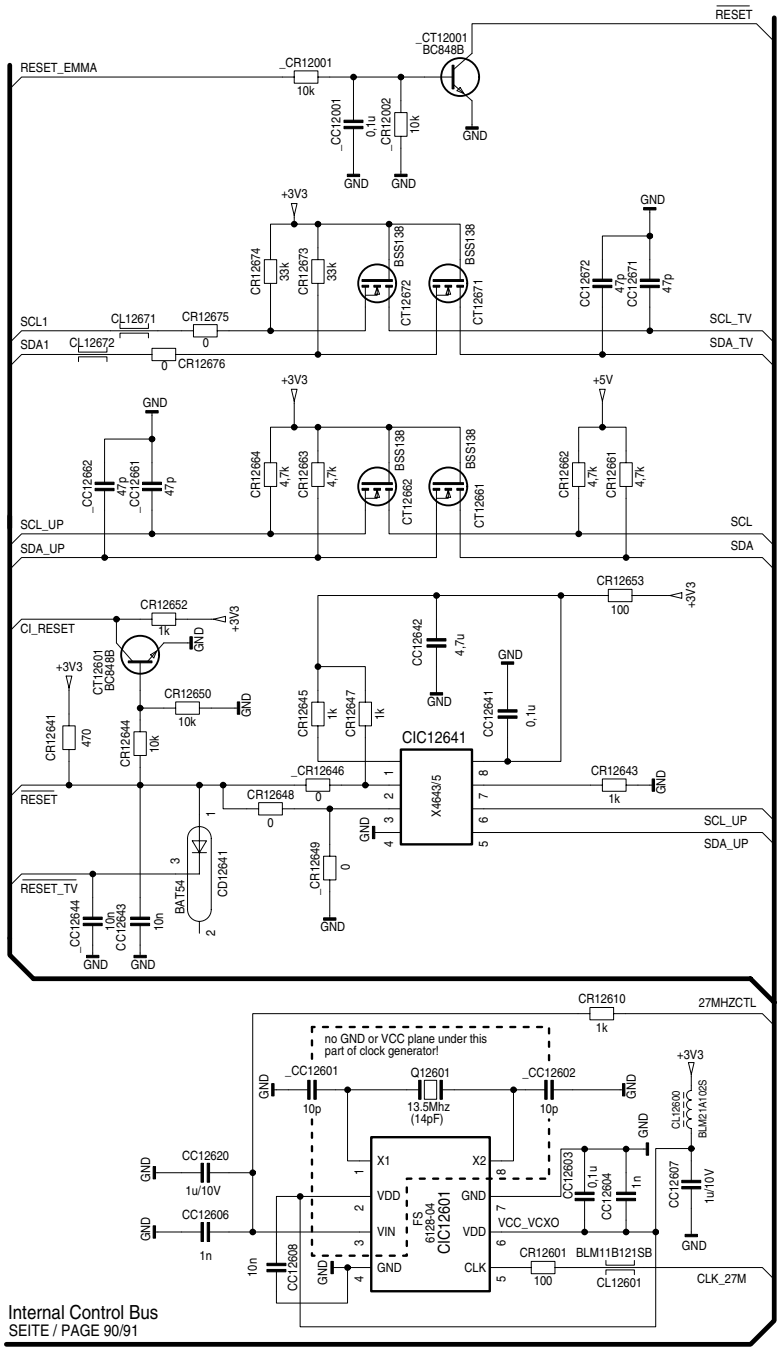
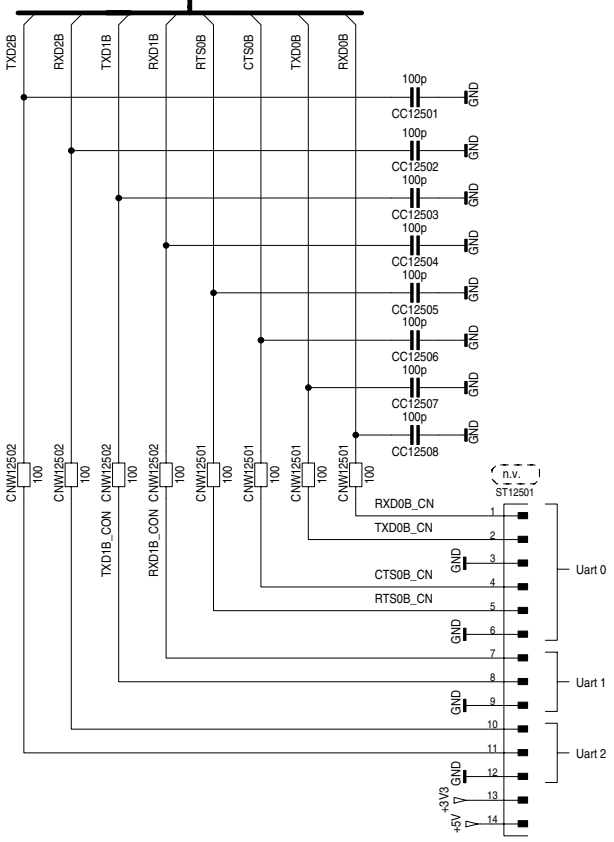
Video ext. SEITE / PAGE 100
Internal Control Bus SEITE / PAGE 100

# FTA-Modul Teil 10 / FTA Module Part 10 29504106100

Platinenabbildungen siehe Seite 50...54
Layout of PCBs see Page 50...54





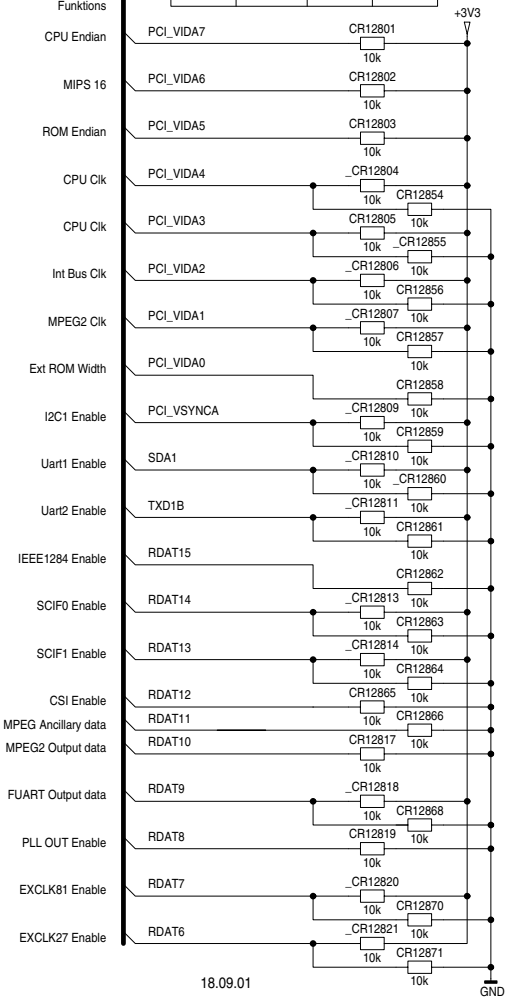




Uart SEITE / PAGE 93/94

Host Strap Pins SEITE / PAGE 93

Configuration for EMMA shrink version

| | 99MHz MPEG CLK | 111MHz CPU CLK | 81MHz BUS CLK |
|---|---|---|---|
| CR12804 | | - | |
| CR12854 | | X | |
| CR12805 | | X | |
| CR12855 | | - | |
| CR12806 | | | - |
| CR12856 | | | X |
| CR12807 | - | | |
| CR12857 | X | | |

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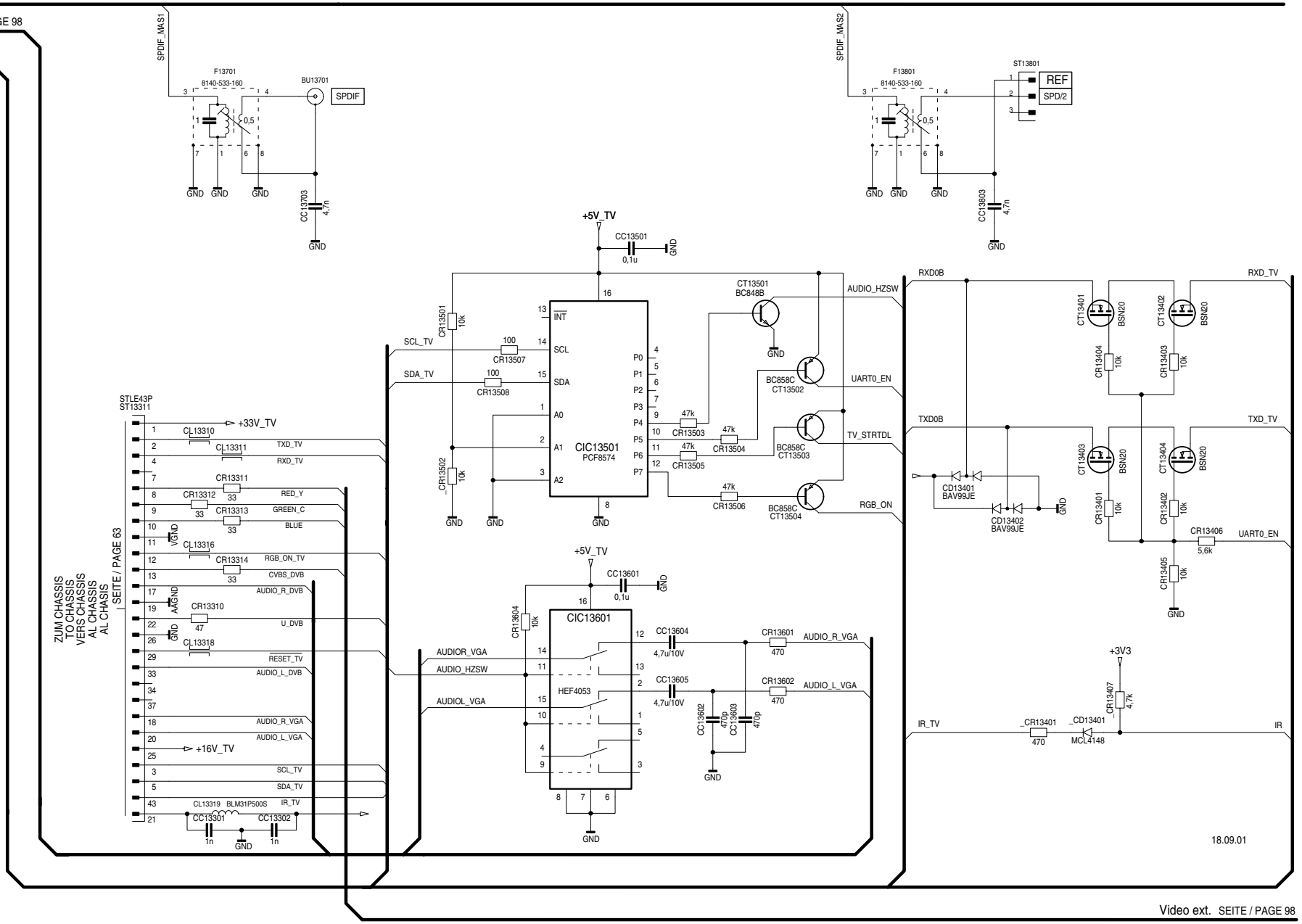
Audio digital SEITE / PAGE 97

Audio analog SEITE / PAGE 98

Internal Control Bus

SEITE / PAGE 89/90/98




Platinenabbildungen siehe Seite 50...54
Layout of PCBs see Page 50...54

GRUNDIG

Ersatzteilliste
Spare Parts List

TV

# 7 / 2002 LENARO 82 MFW 82-6210/9 DOLBY

MATERIAL-NR. / PART NO.: 922276023700 BESTELL-NR. / ORDER NO.: GCN9200 PROCON-SILBER/PROCON-SILVER
VERSION NR./VERSION NO.: **VNM**

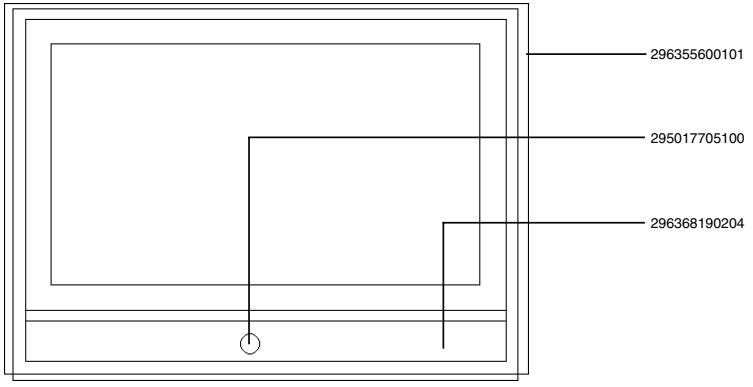
| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|---|---|---|---|---|---|
| | | 922276023700 | | LENARO 82 MFW 82-6210/9 DOLBY<br>PROCON-SILBER<br>KEIN E-TEIL | LENARO 82 MFW 82-6210/9 DOLBY<br>PROCON-SILVER<br>NO SPARE PART |
| 0050.000 | | | | PROGRAMM FLASH-EPROM<br>**DEUTSCHLAND**<br>DOWNLOAD: HTTP://PARTNERWEB.<br>GRUNDIG.DE/KUNDENDIENST | PROGRAM FLASH EPROM<br>**GERMANY**<br>DOWNLOAD: HTTP:// PARTNERWEB.<br>GRUNDIG.DE/KUNDENDIENST |
| 0050.000 | | | | PROGRAMM FLASH-EPROM<br>**INTERNATIONAL**<br>DOWNLOAD: WWW.GRUNDIG.DE/<br>PRODUKTE/KONTAKT/HAENDLERSERVICE | PROGRAM FLASH EPROM<br>**INTERNATIONAL**<br>DOWNLOAD: WWW.GRUNDIG.DE/<br>PRODUCTS/CONTACT/RESELLER SUPPORT |
| 0200.000 | | 296355600101 | | GEH-VORDERTEIL DRUCK KPL | CABINET FRONT PART PRINT |
| 0201.000 | | 191340089700 | 3 | LAUTSPRECHER M.HT-KEGEL 4 OHM | LOUDSPEAKER W.CONICAL TWEETER 4 OHM |
| 0217.000 | | 296384620101 | 5 | SOCKELEINLAGE 6MM | BASE INSERT 6MM |
| 0218.000 | | 295017705100 | | TASTENKNOPF NETZ MONTIERT | KEY KNOB POWER MOUNTED |
| 0219.000 | | 295017700102 | | TASTENKNOPF NETZ | KEY KNOB POWER |
| 0221.000 | | 295017702101 | | TASTENSTOESSEL NETZ | BUTTON STEMKEY KNOB POWER |
| 0225.000 | | 296368190204 | | KLAPPE KPL | FLAP CPL |
| 0226.000 | | 293033750404 | | DRUCKFEDER | PRESSURE SPRING |
| 0227.000 | | 270332210100 | 2 | DRUCKSCHNAEPPER | PRESSURE CATCH |
| 0300.000 | | 296367920102 | | GEH-RUECKTEIL OFB | CABINET REAR PART SURFACE TREATED |
| 0309.000 | | 296367260104 | | ABDECKUNG RUECKTEIL OFB | COVER REAR PART SURFACE TREATED |
| 0310.000 | | 296384760202 | | BASS-BOX KPL 8 OHM | WOOFER BOX CPL 8 OHM |
| 0311.000 | | 191441199700 | | LAUTSPRECHER | CIRCULAR LOUD SPEAKER |
| 0312.000 | | 297006510401 | | ABDECKUNG DIGI-100/3EURO-AV | COVER DIGI-100/3EURO-AV |
| 0312.000 | | 297006530101 | | ABDECKUNG FLASH BAUSTEIN FEATURE | COVER FLASH MODULE FEATURE |
| 0312.000 | | 297006531102 | | ABDECKUNG FLASH BAUSTEIN D-VERST. | COVER FLASH MODULE D-AMPLIFIER |
| 0320.000 | | 291105696303 | | TYPENAUFKLEBER VNM | TYPE LABEL VNM |
| 0350.000 | | 296384610101 | 6 | ZWISCHENSTUECK RUECKWANDBEF. | INTERMEDIATE PIECE REARPANEEL FIXING |
| 0351.000 | | 296385270101 | 2 | ZWISCHENSTUECK KURZ RUECKWANDBEF. | INTERMEDIATE PIECE SHORT<br>REARPANEEL FIXING |
| 0700.000 | ⚠ | 092461547502 | | ENTMAG.-ROTATIONSSPULEN SET<br>M.HALTER KPL | DEGAUSSING ROTATING COIL SET<br>W.HOLDER CP |
| 0740.000 | | 296073090101 | 2 | SPULENHALTER | HOLDER COIL |
| 0750.000 | | 812612529600 | 4 | EINSATZBUCHSE BILDROHR | INSERT SOCKET PICTURE TUBE |
| 0980.000 | | 293050176400 | | LED-PLATTE<br>KEIN E-TEIL | DIODES BOARD<br>NO SPARE PART |
| 0985.000 | | 295017701101 | | AUFNAHME IR/BA | HOLDER IR/BA |
| 1030.000 | | 293051603900 | | BUCHSENPLATTE CLICK-FIT | SOCKET BOARD CLICK-FIT |
| 1031.000 | | 293034252100 | | KURZSCHLUSS-STECKER | SHORT-CIRCUIT PLUG |
| 1040.000 | | 295042041600 | X | BAUSTEIN D-VERSTAERKER | MODULE D-AMPLIFIER |
| 1046.000 | | 297006600104 | | AUFNAHME DD5.1/CLICK-FIT | HOLDER DD5.1/CLICK-FIT |
| 1060.000 | | 293051604200 | | BAUSTEIN EURO-AV | MODULE EURO-AV |
| 1065.000 | | 293031197100 | | EURO-AV BUCHSENLEISTE 21-POL | EURO-AV SOCKET STRIP 21 P |
| 1100.000 | ⚠ | 830007636000 | | BILDR.W 76 LTL 350X97(U) TOSHIBA | PICT.TUBE W 76 LTL 350X97(U) TOSHIBA |







| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|---|---|---|---|---|---|
| 1110.000 | ⚠ | 292013601602 | | ANODENKAPPE M.HOCHSPANNUNGSKABEL | ANODE CAP W.HIGH VOLTAGE CABLE |
| 1300.000 | | 296368550301 | | BEDIENUNGSEINSATZ DRUCK KPL | CONTROL INSERT PRINT CPL |
| 1304.000 | | 295010854300 | | BEDIENPLATTE | CONTROL BOARD |
| 1311.000 | | 297033570100 | 3 | TASTSCHALTER MODE/+/- | KEY SWITCH MODE/+/- |
| 1350.000 | | 295017920201 | | TASTENSATZ PROGRAMM/LAUTSTAERKE | KEYS SET PROGRAMME/VOLUME |
| 1354.000 | | 296380231301 | 2 | DAEMPFUNGSBLOCK | DAMPING BLOCK |
| 1383.000 | | 293033906200 | | KOPFHOERERBUCHSE 3,5 O.SCHALTER | HEADPHONE SOCKET 3,5 W/O SWITCH |
| 1384.000 | | 293031686100 | | CINCH-BUCHSE 3-FACH FBAS/NF L,R | CINCH SOCKET 3 FOLD FBAS/AF L,R |
| 1387.000 | | 293035220300 | | S-VHS BUCHSE | S-VHS-SOCKET |
| 1900.000 | ⚠ | 295010872100 | | NETZSCHALTERPLATTE | POWER SWITCH BOARD |
| 1901.000 | | 295017940102 | 2 | VERRIEGELUNGSKNOPF NETZSCHALTERPL. | LOCK KNOB POWER SWITCH BOARD |
| 1906.000 | | 295017930103 | | AUFNAHME NETZPLATTE | HOLDER POWER BOARD |
| 1960.000 | ⚠ | 297033910100 | | NETZSCHALTER O.WISCHER | POWER SWITCH W/O WIPER |
| WW. | ⚠ | 297033920100 | | NETZSCHALTER O.WISCHER | POWER SWITCH W/O WIPER |
| 1961.000 | | 295017910101 | | VERLAENGERUNG NETZSCHALTER | EXTENSION POWER SWITCH |
| 1990.000 | ⚠ | 096211130206 | 2 | SICHERUNGSHALTER SI60001 | FUSE HOLDER SI60001 |
| 2100.000 | ⚠ | 829099131600 | | NETZKABEL KPL | POWER CABLE CPL |
| 2300.000 | | 293051223200 | X | BILDROHRPLATTE | PICTURE TUBE BOARD |
| 2400.000 | | 296420614202 | | TP 110 C FERNBEDIENUNG | TP 110 C REMOTE CONTROL |
| 2410.000 | | 720086731000 | | DECKEL BATTERIE TP 110 C | BATTERY LID TP 110 C |
| | | 222769410200 | | BEDIENUNGSANLEITUNG D | OPERATING INSTRUCTIONS D |
| | | 222769410300 | | BEDIENUNGSANLEITUNG F/I | OPERATING INSTRUCTIONS F/I |
| | | 222769410400 | | BEDIENUNGSANLEITUNG GB/NL | OPERATING INSTRUCTIONS GB/NL |
| | | 222769410500 | | BEDIENUNGSANLEITUNG E/P | OPERATING INSTRUCTIONS E/P |
| | | 222769410600 | | BEDIENUNGSANLEITUNG DK/FIN | OPERATING INSTRUCTIONS DK/FIN |
| | | 222769410700 | | BEDIENUNGSANLEITUNG S/N | OPERATING INSTRUCTIONS S/N |
| | | 720100423000 | | SERVICE MANUAL D/GB | SERVICE MANUAL D/GB |
| | | 720100423100 | | SERVICE MANUAL D/GB 1.ERGAENZUNG | SERVICE MANUAL D/GB 1ST SUPPLEMENT |
| | | 296560043301 | | MONTAGEZUBEHOER F.BILDROHR<br>KEIN E-TEIL | MOUNTING ACCESSORIES F.PT<br>KEIN E-TEIL |
| | | 297040197100 | X | CHASSIS-FS-STEREO<br>CUC 1935 DIGI 100<br>KEIN E-TEIL | CHASSIS TV STEREO<br>CUC 1935 DIGI 100<br>NO SPARE PART |
| | | | | WW=WAHLWEISE<br>X=SIEHE GESONDERTE E-LISTE | WW=OPTIONAL<br>X=SEE SEPARATE PARTS LIST |



| POS. NR. / POS. NO. | MATERIAL-NR. / PART NUMBER | BEZEICHNUNG / DESCRIPTION |
|---|---|---|
| | 293051604200 | BAUSTEIN EURO-AV<br>MODULE EURO-AV |
| CIC 43470 | 830577345300 | SMD IC 74HCT4053 |
| CT 43410 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 43415 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 43430 | 830100385800 | SMD TRANS BC858B/ BC857B |
| CT 43435 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 43440 | 830100385800 | SMD TRANS BC858B/ BC857B |
| CT 43450 | 830100385800 | SMD TRANS BC858B/ BC857B |
| CT 43455 | 830100884700 | SMD TRANS BC847BT SOT416 |
| CT 43460 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 43485 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 43490 | 830100484800 | SMD TRANS BC848B/ BC847B |
| | 293050176400 | LED-PLATTE<br>DIODES BOARD |
| D 85001 | 830998411600 | LE-DIODE L-115WEGW |
| IC 84001 | 830546183600 | IC TSOP1836/ TSOP4836 |
| | 295010872100 | NETZSCHALTERPLATTE<br>POWER SWITCH BOARD |
| C 62502 ⚠ | 851179384700 | FOKO MKP336.2 0,47UF 20%275VW |
| L 62501 ⚠ | 295008350400 | ENTSTOER-DR 2X19MH |
| R 62503 | 831140127500 | VDR SIOV-S14K275E2S11M5 |
| SI 60001 ⚠ | 831562250300 | SI 5X20 T3,15A H 250V |

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ (!)

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION



GRUNDIG

# Ersatzteilliste
# Spare Parts List

TV

## 7 / 2002

## CHASSIS-FS-STEREO CUC 1935 DIGI 100
## CHASSIS TV STEREO CUC 1935 DIGI 100

MATERIAL-NR. / PART NO.: 297040197100

| POS. NR. / POS. NO. | ABB. / FIG. | MATERIAL-NR. / PART NUMBER | ANZ. / QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|---|---|---|---|---|---|
| | | 297040197100 | | CHASSIS-FS-STEREO CUC 1935 DIGI 100<br>KEIN E-TEIL | CHASSIS TV STEREO CUC 1935 DIGI 100<br>NO SPARE PART |
| 0100.000 | | 295042622300 | X | BAUSTEIN SIGNAL | MODULE SIGNAL |
| 0400.000 | | 295042032800 | X | BAUSTEIN FEATURE | MODULE FEATURE |
| 0451.000 | | 297006521102 | | HALTER BAUSTEIN | HOLDER MODULE |
| 1000.000 | ⚠ | 096211130206 | 2 | SICHERUNGSHALTER SI60501 | FUSE HOLDER SI60501 |
| 1050.000 | ⚠ | 292013610400 | | FOKUS U.UG2-REGLER | FOCUS AND UG2-CONTROLLER |
| 1070.000 | | 293050255100 | | DYN.FOKUSSIERUNGSPLATTE | DYN.FOCUSING BOARD |
| 1071.000 | | 297006540102 | | HALTER FOKUSPLATTE | HOLDER FOCUS BOARD |
| 2400.000 | | 293031530107 | 2 | MONTAGECLIP T53501/60506 | MOUNTING CLIP T53501/60506 |
| 2420.000 | | 293031531208 | 8 | MONTAGECLIP D53571/53572<br>D61515/61521/61524/IC50510<br>T50528/50529 | MOUNTING CLIP D53571/53572<br>D61515/61521/61524/IC50510<br>T50528/50529 |
| 2430.000 | | 293031531605 | | MONTAGECLIP T52503 | MOUNTING CLIP T52503 |
| 2440.000 | | 293031561600 | | ISOLIERUNG D60019 | INSULATING D60019 |
| 2445.000 | | 293031561700 | | ISOLIERUNG D60021 | INSULATION D60021 |
| 2450.000 | | 293031562000 | 6 | FOLIE WAERMELEITEND D61516/61521<br>D61524/IC50510/T50528/50529 | FOIL HEAT CONDUCTING D61516/61521<br>D61524/IC50510/T50528/50529 |
| 2460.000 | | 293031562100 | | FOLIE WAERMELEITEND D53572 | FOIL HEAT CONDUCTING D53572 |
| 2470.000 | | 293031562300 | | FOLIE WAERMELEITEND D53571 | FOIL HEAT CONDUCTING D53571 |
| 2480.000 | | 293031562800 | 2 | FOLIE WAERMELEITEND D60019/60021 | FOIL HEAT CONDUCTING D60019/60021 |
| 2490.000 | | 293031563301 | | FOLIE WAERMELEITEND T60506 | FOIL HEAT CONDUCTING T60506 |
| | | | | X = SIEHE GESONDERTE E-LISTE<br>WW.= WAHLWEISE | X = SEE SEPARATE PARTS LIST<br>WW.= OPTIONAL |

| POS. NR. / POS. NO. | MATERIAL-NR. / PART NUMBER | BEZEICHNUNG / DESCRIPTION |
|---|---|---|
| C 50512 | 845299614700 | ELKO 1000UF 20% 25V |
| C 50526 | 845299614700 | ELKO 1000UF 20% 25V |
| C 53512 | 851591160200 | FOKO FKP1 142PF 2,5% 2000V |
| C 53571 | 851591472100 | FOKO FKP1 0,013UF 3,5% 2000V |
| C 60506 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 60509 | 851591104000 | FOKO FKP1 220PF 10% 1600V |
| C 60512 | 865008111100 | KERKO HV C 270PF 20% 2KV |
| C 60518 | 851591106900 | FOKO FKP1 4700PF 5% 1250V |
| C 60519 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 60521 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 60523 | 865008112500 | KERKO HV C 1000PF 20% 1KV |
| C 60524 | 865008112500 | KERKO HV C 1000PF 20% 1KV |
| C 60526 | 865008112500 | KERKO HV C 1000PF 20% 1KV |
| C 60527 | 865008112500 | KERKO HV C 1000PF 20% 1KV |
| C 60528 | 844330315000 | ELKO SNT #3 150UF 20% 450V |
| C 60529 ⚠ | 851179301800 | FOKO MP3 0,1UF 20% 275VW |
| C 60801 | 865006703100 | KERKO HV C 47PF 20% 2KV |
| C 60802 | 865008112500 | KERKO HV C 1000PF 20% 1KV |
| C 61511 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 61512 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 61514 | 851591103800 | FOKO FKP1 100PF 10% 1600V |
| C 61521 | 865006704600 | KERKO HV C 100PF 20% 1KV |

| POS. NR. / POS. NO. | MATERIAL-NR. / PART NUMBER | BEZEICHNUNG / DESCRIPTION |
|---|---|---|
| C 61522 | 845209705500 | ELKO #16 600/680UF +50-20% 63V |
| C 61524 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 61561 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 61562 | 845209701500 | ELKO #39 1000UF +50-20% 25V |
| C 61563 | 845209701500 | ELKO #39 1000UF +50-20% 25V |
| C 61566 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 62502 ⚠ | 851179304700 | FOKO MP3/KT 0,47UF20% 275V |
| C 62521 ⚠ | 866009823400 | KERKO SI 1000PF 20% 400V |
| C 62548 ⚠ | 866009823800 | KERKO SI 2200PF 20% 400V |
| C 62549 ⚠ | 866009823400 | KERKO SI 1000PF 20% 400V |
| C 64001 ⚠ | 850220006600 | FOKO WIMADUR 1500PF 20% 6000V |
| C 64002 ⚠ | 850220006600 | FOKO WIMADUR 1500PF 20% 6000V |
| C 64003 ⚠ | 853150522100 | FOKO MKT 680PF 20% 15KV |
| C 64006 | 851591160800 | FOKO FKP1 180PF 0+10% 2000V |
| CD 21501 | 833050414800 | MELF DIODE MCL4148 |
| CD 21502 | 833050414800 | MELF DIODE MCL4148 |
| CD 21503 | 833050414800 | MELF DIODE MCL4148 |
| CD 21506 | 832531310300 | MELF DIODE BAV103 |
| CD 21666 | 833050414800 | MELF DIODE MCL4148 |
| CD 52503 | 833050414800 | MELF DIODE MCL4148 |
| CD 53519 | 833050414800 | MELF DIODE MCL4148 |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| CD 55503 | 830945504400 | MELF Z-DIODE 4,3 B 0,5W A |
| CD 55504 | 833050414800 | MELF DIODE MCL4148 |
| CD 57501 | 833050414800 | MELF DIODE MCL4148 |
| CD 57503 | 833050414800 | MELF DIODE MCL4148 |
| CD 57504 | 833050414800 | MELF DIODE MCL4148 |
| CD 57506 | 830945515000 | MELF Z-DIODE 15V B 0,5W |
| CD 58501 | 833050414800 | MELF DIODE MCL4148 |
| CD 58504 | 833050414800 | MELF DIODE MCL4148 |
| CD 58507 | 830945502800 | MELF Z-DIODE 2,7 B 0,5W A |
| CD 58511 | 833050414800 | MELF DIODE MCL4148 |
| CD 58512 | 833050414800 | MELF DIODE MCL4148 |
| CD 58521 | 833050414800 | MELF DIODE MCL4148 |
| CD 58522 | 833050414800 | MELF DIODE MCL4148 |
| CD 60811 | 833010130200 | MELF DIODE BAV 302 |
| CD 60812 | 832561034100 | SMD DIODE STPS340U |
| CD 61528 | 832538430100 | SMD Z-DIODE BZX84B30 |
| CD 61538 | 832561034100 | SMD DIODE STPS340U |
| CD 61548 | 832561034100 | SMD DIODE STPS340U |
| CD 61558 | 832561034100 | SMD DIODE STPS340U |
| CD 70501 | 830945505100 | MELF-Z DIODE 5,1 C 0,5W |
| CD 85513 | 830945505200 | MELF-Z DIODE 5,1 B 0,5W |
| CIC 21660 | 830598600000 | SMD IC 74LV00 |
| CL 60504 | 810498233100 | SMD DAEMPF-PERLE 0805 |
| CT 21670 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 40531 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 40591 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 44515 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 57506 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 58512 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 60806 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 61585 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 85505 | 830100385800 | SMD TRANS BC858B/ BC857B |
| CT 85510 | 830100385800 | SMD TRANS BC858B/ BC857B |
| D 21512 | 830921502000 | DIODE 1N4004 |
| D 40532 | 830921504500 | DIODE 1N4148 |
| D 50513 | 830951627200 | DIODE BYV27/200 |
| D 52506 | 830921502000 | DIODE 1N4004 |
| D 53508 | 830920100500 | DIODE BA157 |
| D 53519 | 830970900300 | Z DIODE ZY 51 |
| D 53571 | 830920435900 | DIODE BY359 1500 |
| D 53572 | 830920423000 | DIODE BY 229-600 |
| D 54501 | 830920100500 | DIODE BA157 |
| D 54511 | 830920100500 | DIODE BA157 |
| D 55512 | 830972033300 | Z DIODE 33 C 0,5W |
| D 60019 | 830919780700 | DIODE STTA806D |
| D 60021 | 830919780700 | DIODE STTA806D |
| D 60509 | 830921140600 | DIODE SF4006 |
| D 60512 | 830951675400 | DIODE BYT53B/ EGP10B |
| D 60523 | 830856038400 | GLR.SKB380C1500/ FBI2L52-4 |
| D 61503 | 830972009900 | Z DIODE 10 B 0,5W |
| D 61511 | 830951603800 | DIODE BYV38 |
| D 61512 | 830951603800 | DIODE BYV38 |
| D 61516 ⚠ | 830951679800 | DIODE BYT 08 P-1000 |
| D 61521 ⚠ | 830919612000 | DIODE STPR1520D |
| D 61524 ⚠ | 830919682000 | DIODE STPR820D |
| D 61533 | 830920100500 | DIODE BA157 |
| D 61561 ⚠ | 830951717200 | DIODE BYW172D/ FUF5402 |
| D 61562 | 830921502000 | DIODE 1N4004 |
| D 61563 | 830921502000 | DIODE 1N4004 |
| D 61566 ⚠ | 830951717200 | DIODE BYW172D/ FUF5402 |
| D 61567 | 830921502000 | DIODE 1N4004 |
| D 61568 | 830921502000 | DIODE 1N4004 |
| D 64010 | 830966306800 | Z-DIODE BZT03D68 |
| D 64011 | 830920002100 | DIODE BAV21 |
| D 64012 | 830920002100 | DIODE BAV21 |
| D 64013 | 830920002100 | DIODE BAV21 |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| D 64014 | 830920002100 | DIODE BAV21 |
| D 64211 | 830971411200 | Z-DIODE 12 C 1,3W |
| D 64212 | 830971411200 | Z-DIODE 12 C 1,3W |
| D 64223 | 830972002500 | Z DIODE 2,4 B 0,5W |
| D 70504 | 830921504500 | DIODE 1N4148 |
| FS 64001 | 293032300200 | FUNKENSTRECKE 1,6KV |
| IC 50510 | 830512597900 | IC STV9379A |
| IC 55510 | 830533814500 | IC TDA8145 |
| IC 58510 | 830520439300 | IC LM393P/ 393N |
| IC 60510 | 830533464700 | IC TDA16846-2 |
| IC 60801 | 830547026400 | IC TNY264 |
| IC 60817 | 830546543100 | IC TS431IZ-AP |
| IC 61510 | 830520435700 | IC LM358N |
| IC 61535 | 830520497800 | IC L4978 |
| IC 61545 | 830520497800 | IC L4978 |
| IC 61555 | 830520497800 | IC L4978 |
| IC 64220 | 830520435700 | IC LM358N |
| L 53501 | 810498205600 | FERRITPERLE HF70 BTL 3,5X6 |
| L 53502 | 810498205600 | FERRITPERLE HF70 BTL 3,5X6 |
| L 53503 | 810498205600 | FERRITPERLE HF70 BTL 3,5X6 FERRITE BEAD |
| L 53511 | 814050524100 | DR A 4,7UH 10% |
| L 53512 | 092401140400 | DROSSEL 1,5 MH CHOKE |
| L 53521 | 292031229500 | LINEARITAETSREGLER LINEARITY CONTROL |
| L 53574 | 092468596601 | BRUECKENSPULE M.KERN BRIDGE COIL W.CORE |
| L 55514 | 092458160100 | O/W AUSKOPPELSPULE E/W DECOUPLING COIL |
| L 60506 | 810498208100 | FERRITPERLE 0,676UH LI |
| L 60507 | 810498208000 | FERRITPERLE 0,676UH |
| L 60518 | 810498208000 | FERRITPERLE 0,676UH FERRITE BEAD |
| L 60528 ⚠ | 292017119700 | SPEICHERDROSSEL EF25/11 STORAGE CHOKE |
| L 60812 | 814052499200 | SIEB-DR 10UH 15% 7608 |
| L 61511 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 61514 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 61521 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 61524 | 810498201400 | DAEMPF-PERLE 433003038102 DAMPING BEAD |
| L 61527 | 814052499200 | SIEB-DR 10UH 15% 7608 |
| L 61538 | 814052499500 | SIEB-DR 330UH 7608 FILTER CHOKE |
| L 61548 | 814052106800 | SPEICHER-DR 67UH EF16/4,7 |
| L 61548 | 814052105900 | SPEICHER-DR 59UH 2,5A STORAGE CHOKE |
| L 61549 | 814052499200 | SIEB-DR 10UH 15% 7608 FILTER CHOKE |
| L 61558 | 814052106800 | SPEICHER-DR 67UH EF16/4,7 |
| L 61558 | 814052106700 | SPEICHER-DR 67UH 2,5A EF16 |
| L 61558 | 814052105900 | SPEICHER-DR 59UH 2,5A EF16 STORAGE CHOKE |
| L 61561 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 61566 | 810498201400 | DAEMPF-PERLE 433003038102 DAMPING BEAD |
| L 64229 ⚠ | 814052495000 | ENTSTOER-DR 2X470UH B8279 INTERFERENCE CHOKE |
| OK 22505 ⚠ | 830600024200 | OPTOKOPPLER IL4216-X001 |
| OK 22505 ⚠ | 830600036200 | OPTOKOPPLER TLP3063 |
| OK 60531 ⚠ | 830600001200 | OPTOKOPPLER CNY17F1 |
| OK 60546 ⚠ | 830600001200 | OPTOKOPPLER CNY17F1 |
| OK 60805 ⚠ | 830600061500 | OPTOKOPPLER SFH615A-2 |
| R 21523 ⚠ | 870532121100 | MOW 0411 2,7 OHM 5% |







| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| R 22501 ⚠ | 831120001800 | PTC DUO B59709-T60-A110 |
| R 22504 | 870004912100 | KSW 0411 100 KOHM 5% |
| R 22506 ⚠ | 870022905700 | KSW NB 0207 220 OHM 5% |
| R 50507 | 876642461000 | MSW 0207 2,4 OHM 1% |
| R 50508 | 876642461000 | MSW 0207 2,4 OHM 1% |
| R 50527 ⚠ | 870042901100 | KSW NB 0207 2,7 OHM 5% ST |
| R 50529 ⚠ | 876635705300 | MSW 0414 150 OHM 5% |
| R 52501 ⚠ | 870532901700 | MOW 0411 4,7 OHM 5% |
| R 52503 ⚠ | 873023923900 | DRW SI ST7 3W 39 OHM 5% |
| R 52505 ⚠ | 870536901600 | MOW 0617 4,3 OHM 5% LI |
| R 52506 ⚠ | 870536000800 | MOW 0617 3,9 OHM 5% |
| R 53508 ⚠ | 870042909700 | KSW NB 0207 10 KOHM 5% ST |
| R 53511 | 870522702100 | MOW 0411 6,8 OHM 5% |
| R 53516 ⚠ | 873028002100 | DRW SI S11 7W 6,8 OHM 5% |
| R 53521 ⚠ | 870536906300 | MOW 0617 390 OHM 5% LI |
| R 54501 ⚠ | 873500303300 | DRW 0,75W 0,33 OHM 10% |
| R 54511 ⚠ | 873500303300 | DRW 0,75W 0,33 OHM 10% |
| R 55512 ⚠ | 870536906500 | MOW 0617 470 OHM 5% LI |
| R 55514 ⚠ | 870123081700 | NKS 3 4,7 OHM 5% |
| R 60502 | 870006935600 | KSW 0617 3 MOHM 2% |
| R 60504 | 870006934100 | KSW 0617 680 KOHM 2% |
| R 60801 | 876521212700 | MSW 0411 180 KOHM 5% |
| R 60802 | 831140107400 | VDR SIOV-S07K385GS3 |
| R 60803 ⚠ | 870042904500 | KSW NB 0207 68 OHM 5% |
| R 60806 ⚠ | 876504915300 | MSW SI 0414 2,2 MOHM VDE |
| R 61508 | 879005005400 | ESTR.SK10-A 22 KOHM LIN |
| R 61512 ⚠ | 870042904900 | KSW NB 0207 100 OHM 5% ST |
| R 61518 | 870522732100 | MOW 0411 100 KOHM 10% |
| R 61527 ⚠ | 870536930100 | MOW 0617 15 KOHM 10% LI |
| R 61533 | 873506404900 | DRW 4 100 OHM 5% STANDB.1 |
| R 62501 ⚠ | 876504914500 | MSW SI 0414 1 MOHM 5% VDE |
| R 62502 | 831100501700 | NTC 4,7 OHM 30% S237/4,7M |
| R 62549 ⚠ | 876634915500 | MSW SI 0414 2,7 MOHM 5% LI |
| R 64003 | 870240109700 | KMW 0411 10 KOHM 10% |
| R 64006 ⚠ | 293035521200 | FOKUS-FUSSPUNKTREGLER |
| R 64211 ⚠ | 870526905100 | MOW 0617 120 OHM 5% |
| R 64212 ⚠ | 870526905100 | MOW 0617 120 OHM 5% |
| SI 52501 ⚠ | 831561202700 | SI LOET T315MA 250V |
| SI 60501 ⚠ | 831562000300 | SI 5X20 T2A L 250V |
| SI 61521 ⚠ | 831562300800 | SI LOET T4A 250V |
| SI 61524 ⚠ | 831562102700 | SI LOET T2,5A 250V AV330 |
| SI 61538 ⚠ | 831561820000 | SI LOET T1A 250V |
| SI 61561 ⚠ | 831562022500 | SI LOET T2A 250V |
| SI 61566 ⚠ | 831562022500 | SI LOET T2A 250V |
| T 21511 | 830340129900 | TRANS.BF299 G/PBF259 RS |
| T 50528 | 830221054400 | TRANS BD544B/ BD538 |
| T 50529 | 830221054300 | TRANS BD543B/ BD537 |
| T 52503 | 830221068200 | TRANS.BD 679A |
| T 53501 | 830262533100 | TRANS 2SC5331 |
| T 60506 | 830263829800 | TRANS 2SK2699 |
| T 64016 | 830328763900 | TRANS.BC 639 |
| T 64110 | 830320554800 | TRANS BC548B/ BC547B |
| T 64224 | 830320554800 | TRANS BC548B/ BC547B |
| T 64227 | 830320555800 | TRANS BC558B/ BC557B |
| T 64241 | 830320555800 | TRANS BC558B/ BC557B |
| T 64243 | 830320555800 | TRANS BC558B/ BC557B |
| T 64246 | 830320554800 | TRANS BC548B/ BC547B |
| TC 22503 | 831001000800 | TRIAC BTB08-600CW F17 |
| TR 52501 ⚠ | 092468679700 | UEBERTRAGER TRANSFORMER |
| TR 53500 ⚠ | 292016800801 | DIODEN-SPLIT TRAFO TRANSFORMER DIODES SPLIT |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| TR 60500 ⚠ | 292015939701 | SPERRWANDLERTRAFO CONVERTER TRANSFORMER |
| TR 60801 ⚠ | 292016299701 | SPERRWANDLERTRAFO CONVERTER TRANSFORMER |
| TR 64001 | 292014499700 | FOKUSSIERUNGSUEBERTRAGER FOCUSING TRANSFORMER |

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ (!)

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

GRUNDIG

Ersatzteilliste
Spare Parts List

TV

# 7 / 2002 LENARO 82 MFW 82-6211/9 DVD

MATERIAL-NR. / PART NO.: 922276223700 BESTELL-NR. / ORDER NO.: GCN9300 PROCON-SILBER/PROCON-SILVER
VERSION NR./VERSION NO.: **VNM**

| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|---|---|---|---|---|---|
| | | 922276223700 | | LENARO 82 MFW 82-6211/9 DVD<br>PROCON-SILBER<br>KEIN E-TEIL | LENARO 82 MFW 82-6211/9 DVD<br>PROCON-SILVER<br>NO SPARE PART |
| 0050.000 | | | | PROGRAMM FLASH-EPROM<br>**DEUTSCHLAND**<br>DOWNLOAD: HTTP://PARTNERWEB.<br>GRUNDIG.DE/KUNDENDIENST | PROGRAM FLASH EPROM<br>**GERMANY**<br>DOWNLOAD: HTTP:// PARTNERWEB.<br>GRUNDIG.DE/KUNDENDIENST |
| 0050.000 | | | | PROGRAMM FLASH-EPROM<br>**INTERNATIONAL**<br>DOWNLOAD: WWW.GRUNDIG.DE/<br>PRODUKTE/KONTAKT/HAENDLERSERVICE | PROGRAM FLASH EPROM<br>**INTERNATIONAL**<br>DOWNLOAD: WWW.GRUNDIG.DE/<br>PRODUCTS/CONTACT/RESELLER SUPPORT |
| 0200.000 | | 296355600101 | | GEH-VORDERTEIL DRUCK KPL | CABINET FRONT PART PRINT |
| 0201.000 | | 191340089700 | 3 | LAUTSPRECHER M.HT-KEGEL 4 OHM | LOUDSPEAKER W.CONICAL TWEETER 4 OHM |
| 0210.000 | | 296355170101 | | ABDECKUNG CD-SCHUBLADE | COVER TRAY OUT PRINT CPL |
| 0217.000 | | 296384620101 | 5 | SOCKELEINLAGE 6MM | BASE INSERT 6MM |
| 0218.000 | | 295017705100 | | TASTENKNOPF NETZ MONTIERT | KEY KNOB POWER MOUNTED |
| 0219.000 | | 295017700102 | | TASTENKNOPF NETZ | KEY KNOB POWER |
| 0219.000 | | 293033750404 | | DRUCKFEDER NETZTASTE | PRESSURE SPRING KNOB POWER |
| 0220.000 | | 295017702101 | | STOESSEL TASTENKNOPF NETZ | BUTTON STEMKEY KNOB POWER |
| 0220.000 | | 295017910101 | | VERLAENGERUNG NETZSCHALTER | EXTENSION POWER SWITCH |
| 0222.000 | | 295017701101 | | AUFNAHME IR/BA | HOLDER IR/BA |
| 0225.000 | | 296368190204 | | KLAPPE KPL | FLAP CPL |
| 0226.000 | | 270332210100 | 2 | DRUCKSCHNAEPPER | PRESSURE CATCH |
| 0227.000 | | 296380231301 | 2 | DAEMPFUNGSBLOCK | DAMPING BLOCK |
| 0300.000 | | 296367920102 | | GEH-RUECKTEIL OFB | CABINET REAR PART SURFACE |
| 0309.000 | | 296367260104 | | ABDECKUNG RUECKTEIL OFB | COVER REAR PART SURFACE TREATED |
| 0310.000 | | 296384760202 | | BASS-BOX KPL 8 OHM | WOOFER BOX CPL 8 OHM |
| 0311.000 | | 191441199700 | | LAUTSPRECHER | CIRCULAR LOUD SPEAKER |
| 0312.000 | | 297006530101 | | ABDECKUNG FLASH BAUSTEIN FEATURE | COVER FLASH MODULE FEATURE |
| 0312.000 | | 297006531102 | | ABDECKUNG FLASH BAUSTEIN D-VERST. | COVER FLASH MODULE D-AMPLIFIER |
| 0320.000 | | 291105706304 | | TYPENAUFKLEBER VNM | TYPE LABEL VNM |
| 0350.000 | | 296384610101 | 6 | ZWISCHENSTUECK RUECKWANDBEF. | INTERMEDIATE PIECE REARPANEEL FIXING |
| 0350.000 | | 296385270101 | 2 | ZWISCHENSTUECK KURZ RUECKWANDBEF. | INTERMEDIATE PIECE SHORT REARPANEEL FIXING |
| 0405.000 | | 293052022100 | X | NETZTEILPLATTE FTA/DVD | POWER SUPPLY BOARD FTA/DV |
| 0600.000 | | 296384930104 | 2 | BOX KPL REAR | BOX CPL REAR |
| 0601.000 | | 191150146101 | | LAUTSPRECHER HOCHTON REAR | LOUDSPEAKER TWEETER REAR |
| 0601.000 | | 191340130201 | | LAUTSPRECHER REAR | SPEAKER REAR |
| 0700.000 | ⚠ | 092461547502 | | ENTMAG.-ROTATIONSSPULEN SET M.HALTER KPL | DEGAUSSING ROTATING COIL SET W.HOLDER CPL |
| 0740.000 | | 296073090101 | 2 | SPULENHALTER | HOLDER COIL |
| 0750.000 | | 812612529600 | 4 | EINSATZBUCHSE BILDROHR | INSERT SOCKET PICTURE TUBE |
| 0990.000 | | 296384890101 | X | DVD-LAUFWERK KPL<br>KEIN E-TEIL | DVD DRIVE MECHANISM CPL<br>NO SPARE PART |
| 0991.000 | | 295017940102 | 2 | VERRIEGELUNGSKNOPF DVD-LAUFWERK | LOCK KNOB DVD DRIVE MECHANISM |
| 0995.000 | | 296385060101 | X | STEUERPLATTE MONT. | CONTROL BOARD MOUNT. |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

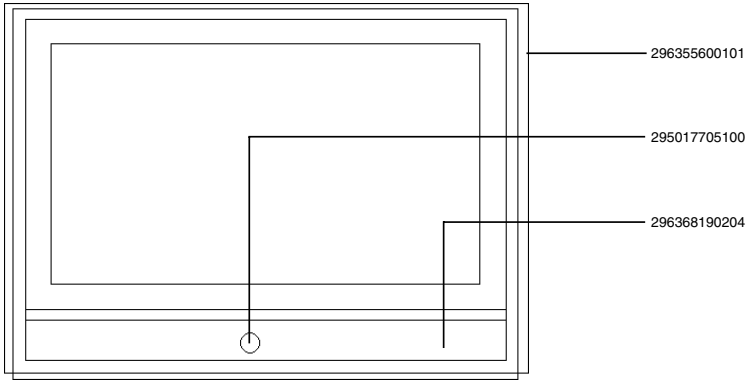




| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|---|---|---|---|---|---|
| 1030.000 | | 293051603900 | | BUCHSENPLATTE CLICK-FIT | SOCKET BOARD CLICK-FIT |
| 1031.000 | | 293034252100 | | KURZSCHLUSS-STECKER | SHORT-CIRCUIT PLUG |
| 1040.000 | | 295042041600 | X | BAUSTEIN D-VERSTAERKER | MODULE D-AMPLIFIER |
| 1046.000 | | 297006600104 | | AUFNAHME DD5.1/CLICK-FIT | HOLDER DD5.1/CLICK-FIT |
| 1100.000 | ⚠ | 830007636000 | | BILDR.W 76 LTL 350X97(U) TOSHIBA | PICT.TUBE W 76 LTL 350X97(U) TOSHIBA |
| 1110.000 | ⚠ | 292013601602 | | ANODENKAPPE M.HOCHSPANNUNGSKABEL | ANODE CAP W.HIGH VOLTAGE CABLE |
| 1300.000 | | 296368550101 | | BEDIENUNGSEINSATZ DRUCK KPL | CONTROL INSERT PRINT CPL |
| 1304.000 | | 295010853400 | | BEDIENPLATTE | CONTROL BOARD |
| 1311.000 | | 297033570100 | | TASTSCHALTER PROGRAMM + | KEY SWITCH PROGRAMME + |
| 1312.000 | | 297033570100 | | TASTSCHALTER PROGRAMM - | KEY SWITCH PROGRAMME - |
| 1313.000 | | 297033570100 | | TASTSCHALTER LAUTSTAERKE + | KEY SWITCH VOLUME + |
| 1314.000 | | 297033570100 | | TASTSCHALTER LAUTSTAERKE - | KEY SWITCH VOLUME - |
| 1350.000 | | 295017920102 | | TASTENSATZ PROGRAMM/LAUTSTAERKE | KEYS SET PROGRAMME/VOLUME |
| 1383.000 | | 293033906200 | | KOPFHOERERBUCHSE 3,5 O.SCHALTER | HEADPHONE SOCKET 3,5 W/O SWITCH |
| 1384.000 | | 293031686100 | | CINCH-BUCHSE 3-FACH FBAS/NF L,R | CINCH SOCKET 3 FOLD FBAS/AF L,R |
| 1387.000 | | 293035220300 | | S-VHS BUCHSE | S-VHS-SOCKET |
| 1900.000 | ⚠ | 295010871100 | | NETZSCHALTERPLATTE | POWER SWITCH BOARD |
| 1901.000 | | 295017940102 | 2 | VERRIEGELUNGSKNOPF NETZSCHALTERPL. | LOCK KNOB POWER SWITCH BOARD |
| 1906.000 | | 295017930103 | | AUFNAHME NETZPLATTE | HOLDER POWER BOARD |
| 1960.000 | ⚠ | 297033910100 | | NETZSCHALTER O.WISCHER | POWER SWITCH W/O WIPER |
| 1960.000 | ⚠ | 297033920100 | WW. | NETZSCHALTER O.WISCHER | POWER SWITCH W/O WIPER |
| 1990.000 | ⚠ | 096211130206 | 2 | SICHERUNGSHALTER SI60001 | FUSE HOLDER SI60001 |
| 2100.000 | ⚠ | 829099131600 | | NETZKABEL KPL | POWER CABLE CPL |
| 2300.000 | | 293051223200 | X | BILDROHRPLATTE | PICTURE TUBE BOARD |
| 2400.000 | | 296420614800 | | TP 140 C FERNBEDIENUNG | TP 140 C REMOTE CONTROL |
| 2410.000 | | 720086731000 | | DECKEL BATTERIE | BATTERY LID |
| | | 222769410900 | | BEDIENUNGSANLEITUNG D | OPERATING INSTRUCTIONS D |
| | | 222769411000 | | BEDIENUNGSANLEITUNG F/I | OPERATING INSTRUCTIONS F/I |
| | | 222769411100 | | BEDIENUNGSANLEITUNG GB/NL | OPERATING INSTRUCTIONS GB/NL |
| | | 222769411200 | | BEDIENUNGSANLEITUNG E/P | OPERATING INSTRUCTIONS E/P |
| | | 222769411300 | | BEDIENUNGSANLEITUNG DK/FIN | OPERATING INSTRUCTIONS DK/FIN |
| | | 222769411400 | | BEDIENUNGSANLEITUNG S/N | OPERATING INSTRUCTIONS S/N |
| | | 720100423000 | | SERVICE MANUAL D/GB | SERVICE MANUAL D/GB |
| | | 720100423100 | | SERVICE MANUAL D/GB 1.ERGAENZUNG | SERVICE MANUAL D/GB 1ST SUPPLEMENT |
| | | 296560043301 | | MONTAGEZUBEHOER F.BILDROHR<br>KEIN E-TEIL | MOUNTING ACCESSORIES F.PT<br>KEIN E-TEIL |
| | | 297040116800 | X | CHASSIS-FS-STEREO<br>CUC 1935 DIGI 100<br>KEIN E-TEIL | CHASSIS TV STEREO<br>CUC 1935 DIGI 100<br>NO SPARE PART |
| | | | | WW=WAHLWEISE<br>X=SIEHE GESONDERTE E-LISTE | WW=OPTIONAL<br>X=SEE SEPARATE PARTS LIST |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| | 295017705100 | TASTENKNOPF NETZ MONTIERT<br>KEY KNOB POWER MOUNTED |
| D 85001 | 830998411600 | LE-DIODE L-115WEGW |
| IC 84001 | 830546183600 | IC TSOP1836/ TSOP4836 |
| | 295010871100 | NETZSCHALTERPLATTE<br>POWER SWITCH BOARD |
| C 62502 ⚠ | 851179384700 | FOKO MKP336.2 0,47UF 20% 275VW |
| CIC 81030 | 830581857400 | SMD IC PCF8574T |
| L 62501 ⚠ | 295008350400 | ENTSTOER-DR 2X19MH |
| R 62503 | 831140127500 | VDR SIOV-S14K275E2S11M5 B |
| SI 60001 ⚠ | 831562250300 | SI 5X20 T3,15A H 250V |




Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ (!)

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION



GRUNDIG

# Ersatzteilliste
# Spare Parts List

TV

**7 / 2002**

## CHASSIS-FS-STEREO CUC 1935 DIGI 100
## CHASSIS TV STEREO CUC 1935 DIGI 100

MATERIAL-NR. / PART NO.: 297040116800

| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|---|---|---|---|---|---|
| | | 297040116800 | | CHASSIS-FS-STEREO CUC 1935 DIGI 100<br>KEIN E-TEIL | CHASSIS TV STEREO CUC 1935 DIGI 100<br>NO SPARE PART |
| 0100.000 | | 295042622300 | X | BAUSTEIN SIGNAL/MU-9/DOLBY | MODULE SIGNAL/MU-9/DOLBY |
| 0400.000 | | 295042032500 | X | BAUSTEIN FEATURE REF.-PLUS | MODULE FEATURE REF.-PLUS |
| 0421.000 | | 297006521102 | | HALTER BAUSTEIN | HOLDER MODULE |
| 0900.000 | ⚠ | 292013610400 | | FOKUS U.UG2-REGLER | FOCUS AND UG2-CONTROLLER |
| 0921.000 | | 297006400100 | | KLAMMER REGLER | CLAMP CONTROL |
| 1000.000 | | 096211130206 | 2 | SICHERUNGSHALTER SI60501 | FUSE HOLDER SI60501 |
| 1070.000 | | 293050255100 | | DYN.FOKUSSIERUNGSPLATTE | DYN.FOCUSING BOARD |
| 1071.000 | | 297006540102 | | HALTER FOKUSPLATTE | HOLDER FOCUS BOARD |
| 2400.000 | | 293031530107 | 2 | MONTAGECLIP T53501/60506 | MOUNTING CLIP T53501/60506 |
| 2420.000 | | 293031531208 | 8 | MONTAGECLIP D53571/53572/<br>D61516/61521/61524/IC50510/<br>T50528/50529 | MOUNTING CLIP D53571/53572/<br>D61516/61521/61524/IC50510/<br>T50528/50529 |
| 2430.000 | | 293031531605 | | MONTAGECLIP T52503 | MOUNTING CLIP T52503 |
| 2440.000 | | 293031561600 | | ISOLIERUNG D60019 | INSULATION D60019 |
| 2445.000 | | 293031561700 | | ISOLIERUNG D60021 | INSULATION D60021 |
| 2460.000 | | 293031562000 | 6 | FOLIE WAERMELEITEND D61516/61521/<br>D61524/IC50510/T50528/50529 | FOIL HEAT CONDUCTING D61516/61521/<br>D61524/IC50510/T50528/50529 |
| 2470.000 | | 293031562100 | | FOLIE WAERMELEITEND D53572 | FOIL HEAT CONDUCTING D53572 |
| 2480.000 | | 293031562300 | | FOLIE WAERMELEITEND D53571 | FOIL HEAT CONDUCTING D53571 |
| 2490.000 | | 293031562800 | 2 | FOLIE WAERMELEITEND D60019/600021 | FOIL HEAT CONDUCTING D60019/600021 |
| 2495.000 | | 293031563301 | | FOLIE WAERMELEITEND D60506 | FOIL HEAT CONDUCTING D60506 |
| | | | | X = SIEHE GESONDERTE E-LISTE<br>WW. = WAHLWEISE | X = SEE SEPARATE PARTS LIST<br>WW. = OPTIONAL |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| C 21512 | 842609806100 | ELKO 4,7UF 350V |
| C 22501 | 856373242500 | FOKO KF #25 0,1UF 20% 250V |
| C 50512 | 845299614700 | ELKO 1000UF 20% 25V |
| C 50526 | 845299614700 | ELKO 1000UF 20% 25V |
| C 53512 | 851591160200 | FOKO FKP1 142PF 2,5% 2000V |
| C 53571 | 851591472100 | FOKO FKP1 0,013UF 3,5% 2000V |
| C 60506 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 60509 | 851591104000 | FOKO FKP1 220PF 10% 1600V |
| C 60512 | 865008111100 | KERKO HV C 270PF 20% 2KV |
| C 60518 | 851591106900 | FOKO FKP1 4700PF 5% 1250V |
| C 60519 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 60521 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 60523 | 865008112500 | KERKO HV C 1000PF 20% 1KV |
| C 60524 | 865008112500 | KERKO HV C 1000PF 20% 1KV |
| C 60526 | 865008112500 | KERKO HV C 1000PF 20% 1KV |
| C 60527 | 865008112500 | KERKO HV C 1000PF 20% 1KV |
| C 60528 | 844330315000 | ELKO SNT #3 150UF 20% 450V |
| C 60529 ⚠ | 851179301800 | FOKO MP3 0,1UF 20% 275VW |
| C 60801 | 865006703100 | KERKO HV C 47PF 20% 2KV |
| C 60802 | 865008112500 | KERKO HV C 1000PF 20% 1KV |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| C 61511 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 61512 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 61514 | 851591103800 | FOKO FKP1 100PF 10% 1600V |
| C 61516 | 845209713100 | ELKO #31 100UF 250V |
| C 61521 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 61522 | 845209705500 | ELKO #16 600/680UF +50-20 63V |
| C 61524 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 61561 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 61566 | 865006704600 | KERKO HV C 100PF 20% 1KV |
| C 62502 ⚠ | 851179304700 | FOKO MP3/KT 0,47UF20% 275VW |
| C 62521 ⚠ | 866009823400 | KERKO SI 1000PF 20% 400V |
| C 62548 ⚠ | 866009823800 | KERKO SI 2200PF 20% 400V |
| C 62549 ⚠ | 866009823400 | KERKO SI 1000PF 20% 400V |
| C 64001 ⚠ | 850220006600 | FOKO WIMADUR 1500PF 20% 6000V |
| C 64002 ⚠ | 850220006600 | FOKO WIMADUR 1500PF 20% 6000V |
| C 64003 ⚠ | 853150522100 | FOKO MKT 680PF 20% 15KV |
| C 64006 | 851591160800 | FOKO FKP1 180PF 0+10% 2000V |
| CD 21501 | 833050414800 | MELF DIODE MCL4148 |
| CD 21502 | 833050414800 | MELF DIODE MCL4148 |

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| POS. NR. / POS. NO. | MATERIAL-NR. / PART NUMBER | BEZEICHNUNG / DESCRIPTION |
|---|---|---|
| CD 21503 | 833050414800 | MELF DIODE MCL4148 |
| CD 21506 | 832531310300 | MELF DIODE BAV103 |
| CD 21666 | 833050414800 | MELF DIODE MCL4148 |
| CD 52503 | 833050414800 | MELF DIODE MCL4148 |
| CD 53519 | 833050414800 | MELF DIODE MCL4148 |
| CD 55503 | 830945504400 | MELF Z-DIODE 4,3 B 0,5W A |
| CD 55504 | 833050414800 | MELF DIODE MCL4148 |
| CD 57501 | 833050414800 | MELF DIODE MCL4148 |
| CD 57503 | 833050414800 | MELF DIODE MCL4148 |
| CD 57504 | 833050414800 | MELF DIODE MCL4148 |
| CD 57506 | 830945515000 | MELF Z-DIODE 15V B 0,5W |
| CD 58501 | 833050414800 | MELF DIODE MCL4148 |
| CD 58504 | 833050414800 | MELF DIODE MCL4148 |
| CD 58507 | 830945502800 | MELF Z-DIODE 2,7 B 0,5W A |
| CD 58511 | 833050414800 | MELF DIODE MCL4148 |
| CD 58512 | 833050414800 | MELF DIODE MCL4148 |
| CD 58521 | 833050414800 | MELF DIODE MCL4148 |
| CD 58522 | 833050414800 | MELF DIODE MCL4148 |
| CD 60811 | 833010130200 | MELF DIODE BAV 302 |
| CD 60812 | 832561034100 | SMD DIODE STPS340U |
| CD 61528 | 832538430100 | SMD Z-DIODE BZX84B30 |
| CD 61538 | 832561034100 | SMD DIODE STPS340U |
| CD 61548 | 832561034100 | SMD DIODE STPS340U |
| CD 61558 | 832561034100 | SMD DIODE STPS340U |
| CD 70501 | 830945505100 | MELF-Z DIODE 5,1 C 0,5W |
| CD 85513 | 830945505200 | MELF-Z DIODE 5,1 B 0,5W |
| CIC 21660 | 830598600000 | SMD IC 74LV00 |
| CL 60504 | 810498233100 | SMD DAEMPF-PERLE 0805 BLM |
| CT 21670 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 40531 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 40591 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 44515 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 57506 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 58512 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 60806 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 61585 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 85505 | 830100385800 | SMD TRANS BC858B/ BC857B |
| CT 85510 | 830100385800 | SMD TRANS BC858B/ BC857B |
| D 21512 | 830921502000 | DIODE 1N4004 |
| D 40532 | 830921504500 | DIODE 1N4148 |
| D 50513 | 830951627200 | DIODE BYV27/200 |
| D 52506 | 830921502000 | DIODE 1N4004 |
| D 53508 | 830920100500 | DIODE BA157 |
| D 53519 | 830970900300 | Z DIODE ZY 51 |
| D 53571 | 830920435900 | DIODE BY359 1500 |
| D 53572 | 830920423000 | DIODE BY 229-600 |
| D 54501 | 830920100500 | DIODE BA157 |
| D 54511 | 830920100500 | DIODE BA157 |
| D 55512 | 830972033300 | Z DIODE 33 C 0,5W |
| D 60019 | 830919780700 | DIODE STTA806D |
| D 60021 | 830919780700 | DIODE STTA806D |
| D 60509 | 830921140600 | DIODE SF4006 |
| D 60512 | 830951675400 | DIODE BYT53B/ EGP10B |
| D 60523 | 830856038400 | GLR.SKB380C1500/ FBI2L52-4 |
| D 61503 | 830972009900 | Z DIODE 10 B 0,5W |
| D 61511 | 830951603800 | DIODE BYV38 TFK |
| D 61512 | 830951603800 | DIODE BYV38 TFK |
| D 61516 ⚠ | 830951679800 | DIODE BYT 08 P-1000 |
| D 61521 ⚠ | 830919612000 | DIODE STPR1520D |
| D 61524 ⚠ | 830919682000 | DIODE STPR820D |
| D 61533 | 830920100500 | DIODE BA157 |
| D 61561 ⚠ | 830951717200 | DIODE BYW172D |
| D 61562 | 830921502000 | DIODE 1N4004 |
| D 61563 | 830921502000 | DIODE 1N4004 |
| D 61566 ⚠ | 830951717200 | DIODE BYW172D |
| D 61567 | 830921502000 | DIODE 1N4004 |

| POS. NR. / POS. NO. | MATERIAL-NR. / PART NUMBER | BEZEICHNUNG / DESCRIPTION |
|---|---|---|
| D 61568 | 830921502000 | DIODE 1N4004 |
| D 64010 | 830966306800 | Z-DIODE BZT03D68 |
| D 64011 | 830920002100 | DIODE BAV21 |
| D 64012 | 830920002100 | DIODE BAV21 |
| D 64013 | 830920002100 | DIODE BAV21 |
| D 64014 | 830920002100 | DIODE BAV21 |
| D 64211 | 830971411200 | Z-DIODE 12 C 1,3W |
| D 64212 | 830971411200 | Z-DIODE 12 C 1,3W |
| D 64223 | 830972002500 | Z DIODE 2,4 B 0,5W |
| D 70504 | 830921504500 | DIODE 1N4148 |
| FS 64001 | 293032300200 | FUNKENSTRECKE 1,6KV |
| IC 50510 | 830512597900 | IC STV9379A |
| IC 55510 | 830533814500 | IC TDA8145 |
| IC 58510 | 830520439300 | IC LM393P |
| IC 60510 | 830533464700 | IC TDA16846-2 |
| IC 60801 | 830547026400 | IC TNY264 |
| IC 60817 | 830546543100 | IC TS431IZ-AP |
| IC 61510 | 830520435700 | IC LM358N |
| IC 61535 | 830520497800 | IC L4978 |
| IC 61545 | 830520497800 | IC L4978 |
| IC 61555 | 830520497800 | IC L4978 |
| IC 64220 | 830520435700 | IC LM358N |
| L 53501 | 810498205600 | FERRITPERLE HF70 BTL 3,5X |
| L 53502 | 810498205600 | FERRITPERLE HF70 BTL 3,5X |
| L 53503 | 810498205600 | FERRITPERLE HF70 BTL 3,5X FERRITE BEAD |
| L 53511 | 814050524100 | DR A 4,7UH 10% |
| L 53512 | 092401140400 | DROSSEL 1,5 MH |
| L 53521 | 292031229500 | LINEARITAETSREGLER LINEARITY CONTROL |
| L 53574 | 092468596601 | BRUECKENSPULE M.KERN BRIDGE COIL W. CORE |
| L 55514 | 092458160100 | O/W AUSKOPPELSPULE E/W DECOUPLING COIL |
| L 60506 | 810498208100 | FERRITPERLE 0,676UH LI |
| L 60507 | 810498208000 | FERRITPERLE 0,676UH 57205 |
| L 60518 | 810498208000 | FERRITPERLE 0,676UH 57205 FERRITE BEAD |
| L 60528 ⚠ | 292017119700 | SPEICHERDROSSEL EF25/11 STORAGE CHOKE |
| L 60812 | 814052499200 | SIEB-DR 10UH 15% 7608 |
| L 61511 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 61514 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 61521 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 61524 | 810498201400 | DAEMPF-PERLE 433003038102 DAMPING BEAD |
| L 61527 | 814052499200 | SIEB-DR 10UH 15% 7608 |
| L 61538 | 814052499500 | SIEB-DR 330UH 7608 |
| L 61548 | 814052106800 | SPEICHER-DR 67UH EF16/4,7 |
| L 61548 | 814052105900 | SPEICHER-DR 59UH 2,5A STORAGE CHOKE |
| L 61549 | 814052499200 | SIEB-DR 10UH 15% 7608 |
| L 61558 | 814052106800 | SPEICHER-DR 67UH EF16/4,7 |
| L 61558 | 814052106700 | WW. SPEICHER-DR EF16 67UH 2,5 |
| L 61558 | 814052105900 | WW. SPEICHER-DR 59UH 2,5A STORAGE CHOKE |
| L 61561 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 61566 | 810498201400 | DAEMPF-PERLE 433003038102 DAMPING BEAD |
| L 64229 ⚠ | 814052495000 | ENTSTOER-DR 2X470UH B8279 |
| OK 22505⚠ | 830600036200 | OPTOKOPPLER TLP3063 |
| OK 22505⚠ | 830600024200 | OPTOKOPPLER IL4216-X001 |
| OK 60531⚠ | 830600001200 | OPTOKOPPLER CNY17F1 |
| OK 60546⚠ | 830600001200 | OPTOKOPPLER CNY17F1 |
| OK 60805⚠ | 830600061500 | OPTOKOPPLER SFH615A-2 |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

| POS. NR. / POS. NO. | MATERIAL-NR. / PART NUMBER | BEZEICHNUNG / DESCRIPTION |
|---|---|---|
| R 21523 ⚠ | 870532121100 | MOW 0411 2,7 OHM 5% |
| R 22501 ⚠ | 831120001800 | PTC DUO B59709-T60-A110 |
| R 22504 | 870004912100 | KSW 0411 100 KOHM 5% |
| R 22506 ⚠ | 870022905700 | KSW NB 0207 220 OHM 5% |
| R 50507 ⚠ | 876642461000 | MSW 0207 2,4 OHM 1% |
| R 50508 ⚠ | 876642461000 | MSW 0207 2,4 OHM 1% |
| R 50527 ⚠ | 870042901100 | KSW NB 0207 2,7 OHM 5% ST |
| R 50529 ⚠ | 876635705300 | MSW 0414 150 OHM 5% |
| R 52501 ⚠ | 870532901700 | MOW 0411 4,7 OHM 5% |
| R 52503 ⚠ | 873023923900 | DRW SI ST7 3W 39 OHM 5% |
| R 52505 ⚠ | 870536901600 | MOW 0617 4,3 OHM 5% LI |
| R 52506 ⚠ | 870536000800 | MOW 0617 3,9 OHM 5% |
| R 53508 ⚠ | 870042909700 | KSW NB 0207 10 KOHM 5% ST |
| R 53511 | 870522702100 | MOW 0411 6,8 OHM 5% |
| R 53516 ⚠ | 873028002100 | DRW SI S11 7W 6,8 OHM 5% |
| R 53521 ⚠ | 870536906300 | MOW 0617 390 OHM 5% LI |
| R 54501 ⚠ | 873500303300 | DRW 0,75W 0,33 OHM 10% |
| R 54511 ⚠ | 873500303300 | DRW 0,75W 0,33 OHM 10% |
| R 55512 ⚠ | 870536906500 | MOW 0617 470 OHM 5% LI |
| R 55514 ⚠ | 870123081700 | NKS 3 4,7 OHM 5% |
| R 60502 | 870006935600 | KSW 0617 3 MOHM 2% |
| R 60504 | 870006934100 | KSW 0617 680 KOHM 2% |
| R 60508 | 873018970100 | DRW 9 15 KOHM 10% |
| R 60801 | 876521212700 | MSW 0411 180 KOHM 5% |
| R 60802 | 831140107400 | VDR SIOV-S07K385GS3 |
| R 60803 ⚠ | 870042904500 | KSW NB 0207 68 OHM 5% |
| R 60806 ⚠ | 876504915300 | MSW SI 0414 2,2 MOHM VDE |
| R 61508 | 879005005400 | ESTR.SK10-A 22 KOHM LIN |
| R 61512 ⚠ | 870042904900 | KSW NB 0207 100 OHM 5% |
| R 61518 | 870522732100 | MOW 0411 100 KOHM 10% |
| R 61527 ⚠ | 870536930100 | MOW 0617 15 KOHM 10% LI |
| R 61533 | 873506404900 | DRW 4 100 OHM 5% STANDB.1 |
| R 62501 ⚠ | 876504914500 | MSW SI 0414 1 MOHM 5% VDE |
| R 62502 | 831100501700 | NTC 4,7 OHM 30% S237/4,7M |
| R 62549 ⚠ | 876634915500 | MSW SI 0414 2,7 MOHM 5% |
| R 64003 | 870240109700 | KMW 0411 10 KOHM 10% |
| R 64006 ⚠ | 293035521200 | FOKUS-FUSSPUNKTREGLER |
| R 64211 ⚠ | 870526905100 | MOW 0617 120 OHM 5% |
| R 64212 ⚠ | 870526905100 | MOW 0617 120 OHM 5% |
| SI 52501 ⚠ | 831561202700 | SI LOET T315MA 250V |
| SI 60501 ⚠ | 831562000300 | SI 5X20 T2A L 250V |
| SI 61521 ⚠ | 831562300800 | SI LOET T4A 250V |
| SI 61524 ⚠ | 831562102700 | SI LOET T2,5A 250V |
| SI 61538 ⚠ | 831561820000 | SI LOET T1A 250V |
| SI 61561 ⚠ | 831562022500 | SI LOET T2A 250V |
| SI 61566 ⚠ | 831562022500 | SI LOET T2A 250V |
| T 21511 | 830340129900 | TRANS.BF299 G/PBF259 |
| T 50528 | 830221054400 | TRANS BD544B/ BD538 |
| T 50529 | 830221054300 | TRANS BD543B/ BD537 |
| T 52503 | 830221068200 | TRANS.BD 679A |
| T 53501 | 830262533100 | TRANS 2SC5331 |
| T 60506 | 830263829800 | TRANS 2SK2699 |
| T 64016 | 830328763900 | TRANS.BC 639 |
| T 64110 | 830320554800 | TRANS BC548B/ BC547B |
| T 64224 | 830320554800 | TRANS BC548B/ BC547B |
| T 64227 | 830320555800 | TRANS BC558B/ BC557B |
| T 64241 | 830320555800 | TRANS BC558B/ BC557B |
| T 64243 | 830320555800 | TRANS BC558B/ BC557B |
| T 64246 | 830320554800 | TRANS BC548B/ BC547B |
| TC 22503 | 831001000800 | TRIAC BTB08-600CW F17 |
| TR 52501⚠ | 092468679700 | UEBERTRAGER TRANSFORMER |

| POS. NR. / POS. NO. | MATERIAL-NR. / PART NUMBER | BEZEICHNUNG / DESCRIPTION |
|---|---|---|
| TR 53500⚠ | 292016800801 | DIODEN-SPLIT TRAFO DIODE SPLIT TRANSFORMER |
| TR 60500⚠ | 292015939702 | SPERRWANDLERTRAFO REVERSE CONVERTER TRANSFORMER |
| TR 60801⚠ | 292016299701 | SPERRWANDLERTRAFO REVERSE CONVERTER TRANSFORMER |
| TR 64001 | 292014499700 | FOKUSSIERUNGSUEBERTRAGER FOCUSING TRANSFORMER |

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ (!)

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

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# Ersatzteilliste
# Spare Parts List

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## BAUSTEIN FEATURE
## MODULE FEATURE

MATERIAL-NR. / PART NO.: 295042032800

| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|---|---|---|---|---|---|
| | | 295042032800 | | BAUSTEIN FEATURE | MODULE FEATURE |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| CD 70125 | 830953414900 | MELF-DIODE LL4148 |
| CD 70126 | 830945505200 | MELF-Z DIODE 5,1B 0,5W |
| CD 70128 | 830953414900 | MELF-DIODE LL4148 |
| CD 70227 | 833071504200 | MELF DIODE TMMBAT42 |
| CD 70305 | 830953414900 | MELF-DIODE LL4148 |
| CD 70306 | 830953414900 | MELF-DIODE LL4148 |
| CD 80064 | 830953414900 | MELF-DIODE LL4148 |
| CD 80101 | 830953414900 | MELF-DIODE LL4148 |
| CD 80259 | 833071504200 | MELF DIODE TMMBAT42 |
| CD 82003 | 833071504200 | MELF DIODE TMMBAT42 |
| CIC70150 | 830577345300 | SMD IC 74HCT4053 |
| CIC70180 | 830583770500 | IC TL7705ACD-R |
| CIC70200 | 830599323000 | SMD IC VPC3230D |
| CIC70250 | 830594940000 | SMD IC SDA9400 |
| CIC70300 | 830455331000 | SMD IC DDP3310F6 |
| CIC70475 | 830576035800 | SMD IC LM358M |
| CIC80000 | 830594600000 | SMD IC SDA6000 P-MQFP-128 |
| CIC80240 | 830598602500 | SMD IC KF25BD-TR SO8 |
| CIC80250 | 830599164000 | SMD IC V6340/O 3V |
| CIC82001 | 297981191000 | IC FLASH-EPROM PROG.KPL |
| CIC82001 | 830470822400 | SMD IC MBM29DL323TD90PFTN |
| CIC82031 | 830595078600 | SMD IC 74V1G86S |
| CIC82041 | 830593136000 | SMD IC HYB39S64160BT-8 |
| CL 70271 | 810498231600 | SMD DAEMPF-PERLE 0603 BLM |
| CL 70321 | 810498231100 | SMD DAEMPF-PERLE 0603 BLM |
| CL 70322 | 810498231100 | SMD DAEMPF-PERLE 0603 BLM |
| CL 80020 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 80109 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 80110 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 80256 | 810498231600 | SMD DAEMPF-PERLE 0603 BLM SMD DAMPING BEAD |
| CNW80121 | 877100136500 | SMD R-NETZ 4X470 OHM 5% |
| CNW80132 | 877100137300 | SMD R-NETZ 4X1 KOHM 5% |
| CNW80144 | 877100137300 | SMD R-NETZ 4X1 KOHM 5% |
| CNW80161 | 877100137300 | SMD R-NETZ 4X1 KOHM 5% |
| CNW80171 | 877100140500 | SMD R-NETZ 4X22 KOHM 5% |
| CNW80181 | 877100137300 | SMD R-NETZ 4X1 KOHM 5% |
| CNW80191 | 877100140500 | SMD R-NETZ 4X22 KOHM 5% |
| CT 70011 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 70015 | 830100484800 | SMD TRANS BC848B/BC847B |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| CT 70155 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 70305 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 70410 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 70412 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 70415 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 70420 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 70422 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 70425 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 70430 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 70432 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 70435 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 70465 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 70470 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80004 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80008 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80009 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80021 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 80022 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80033 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 80034 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80068 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80075 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80080 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 80085 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80090 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80095 | 830100484800 | SMD TRANS BC848B/BC847B |
| CT 80105 | 830100385800 | SMD TRANS BC858B/BC857B |
| CT 80108 | 830119602000 | SMD TRANS FET BSN20 |
| CT 80110 | 830119602000 | SMD TRANS FET BSN20 |
| CT 80204 | 830100385800 | SMD TRANS BC858B/BC857B |
| F 70011 | 814060231900 | FILTER 5X5 #319 4FACH |
| L 70002 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70003 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70004 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70005 | 810498201400 | DAEMPF-PERLE 433003038102 DAMPIMG BEAD |
| L 70016 | 814053208500 | SPULE 5X5 085 SIGN 532085 |
| L 70017 | 814053208600 | SPULE 5X5 086 SIGN 532086 COIL |
| L 70201 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70205 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70211 | 810498201400 | DAEMPF-PERLE 433003038102 |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| L 70215 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70218 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70221 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70251 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70261 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70301 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70320 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70402 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 70473 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 80237 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 80248 | 810498201400 | DAEMPF-PERLE 433003038102 |
| L 80253 | 810498201400 | DAEMPF-PERLE 433003038102 DAMPING BEAD |
| Q 70228 | 838244220300 | QUARZ #442-1 13C 20,25MHZ |
| Q 70275 | 838233627200 | QUARZ #336-1 13C 27MHZ |
| Q 70320 | 838218650000 | QUARZ #186 5MHZ |
| Q 80205 | 838224609600 | QUARZ 6,0 MHZ |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|

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The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

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Spare Parts List

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### NETZTEIL DIGI 100
### POWEWR SUPPLY DIGI 100

MATERIAL-NR. / PART NO.: 293052022200

| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|---|---|---|---|---|---|
| | | 293052022200 | | NETZTEIL DIGI 100<br>KEIN E-TEIL | POWER SUPPLY DIGI 100<br>NO SPARE PART |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| C 60019 | 866820312300 | ABBLOCK-C 0,1 UF -GR NUR |
| C 60020 | 866820312300 | ABBLOCK-C 0,1 UF -GR NUR |
| C 60021 | 866820312300 | ABBLOCK-C 0,1 UF -GR NUR |
| C 60024 | 866820312300 | ABBLOCK-C 0,1 UF -GR NUR |
| C 60026 | 866820312300 | ABBLOCK-C 0,1 UF -GR NUR |
| D 60001 | 830856038400 | GLR.SKB380C1500/ FBI2L52- |
| D 60006 | 830966320000 | Z-DIODE BZT03D200 AV619 - |
| D 60007 | 830951602600 | DIODE BYV26C TEMIC/PHI AV |
| D 60011 | 830951675500 | DIODE BYT 53 D GEG.N.AV 6 |
| D 60012 | 830922034000 | DIODE 1N5822 |
| D 60021 | 830921504500 | DIODE 1N4148 AV619 -GA |
| IC 60010 | 830545923300 | IC TOP233Y07B POWER INTE |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| IC 60025 | 830544043100 | IC TL431CLPRP MOT AV330 E |
| L 60001 ⚠ | 814052491000 | ENTSTOER-DR 2X30MH 0,4A 5 |
| L 60002 | 292017049701 | DROSSEL PFC B82991-S2601- |
| L 60011 | 814052499200 | SIEB-DR 10UH 15% 7608 SA |
| L 60012 | 814052499200 | SIEB-DR 10UH 15% 7608 SA |
| L 60013 | 092410595100 | STABKERNDROSSEL 10UH |
| O 60020 ⚠ | 830600061500 | OPTOKOPPLER SFH615A-2 IN |
| OK60021 ⚠ | 830600061500 | OPTOKOPPLER SFH615A-2 IN |
| R 60001 | 831140107400 | VDR SIOV-S07K385GS3 EPC |
| SI 60001 ⚠ | 831561750300 | SI 5X20 T1A H 250V |
| TR 60010 ⚠ | 292016279701 | SPERRWANDLERTRAFO VOGT |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

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## 2 / 2002

## MODUL DER 1100 S-CI

ERSAETZT AUSGABE 9/2001
SUBSTITUTE EDITION 9/2001

MATERIAL-NR. / PART NO.: 928016430500
BESTELL-NR. / ORDER NO.: GAG6600

| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|---|---|---|---|---|---|
| | | 928016430500 | | MODUL DER 1100 S-CI<br>KEIN E-TEIL | MODULE DER 1100 S-CI<br>NO SPARE PART |
| | | 295041066100 | X | BAUSTEIN MODUL-FTA | MODULE-FTA DIGI100 |
| 0100.000 | | 295044510400 | | TUNER SAT | TUNER SAT |
| 0312.000 | | 297006510502 | | ABDECKUNG DIGI-100 | COVER DIGI-100 |
| | ⚠ | 293052022200 | X | NETZTEIL DIGI 100<br>KEIN E-TEIL | POWER SUPPLY DIGI 100<br>NO SPARE PART |
| 0450.000 | | 297006521102 | | HALTER BAUSTEIN | HOLDER MODULE |
| | | 280179421800 | | BEDIENUNGSANLEITUNG | OPERATING INSTRUCTIONS |
| | | 720100417000 | | MONTAGEANLEITUNG | MOUNTING INSTRUCTIONS |
| | | | | X = SIEHE GESONDERTE E-LISTE | X = SEE SEPARATE PARTS LIST |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION



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### BAUSTEIN MODUL-FTA DIGI 100
### MODULE FTA DIGI 100

MATERIAL-NR. / PART NO.: 295041066100

| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|---|---|---|---|---|---|
| | | 295041066100 | | BAUSTEIN MODUL-FTA DIGI100 | MODULE-FTA DIGI100 |
| 0110.000 | | 833050414800 | | MELF DIODE MCL4148 | MELF DIODE MCL4148 |
| 0550.000 | | 295044510400 | | TUNER SAT (NIM-MODUL) FTA | TUNER SAT (NIM-MODUL) FTA |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| BU 13701 | 293031682200 | CINCH-BUCHSE 1-FACH |
| CD 02301 | 832561034100 | SMD DIODE STPS340U STM |
| CD 02302 | 832561034100 | SMD DIODE STPS340U STM |
| CD 04101 | 833050414800 | MELF DIODE MCL4148 |
| CD 13401 | 830931309900 | SMD DIODE BAV99 |
| CD 13402 | 830931309900 | SMD DIODE BAV99 |
| CIC 02301 | 830596588300 | SMD IC A8283SLB SO24 AV21 |
| CIC 03301 | 830470024700 | SMD IC 74LCX245MTCX/-TTR/ |
| CIC 03321 | 830471637300 | SMD IC 74LCX16373MTDX/-TT |
| CIC 04101 | 830577600100 | SMD IC MC74HC02ADR2 SO14 |
| CIC 04102 | 830471256200 | SMD IC MIC2562A-OBM SO14 |
| CIC 06100 | 830592648100 | SMD IC MT48LC1M16A1TG/K4S |
| CIC 07001 | 830592648400 | SMD IC MT48LC4M16A2TG-7S/ |
| CIC 07101 | 830592648400 | SMD IC MT48LC4M16A2TG-7S/ |
| CIC 08301 | 830470822300 | SMD IC MBM29DL323BD90PFTN |
| CIC 09601 | 830577545300 | SMD IC 74VHC4053MTC TSSOP |
| CIC 12641 | 830596144300 | SMD IC X4643S8-2.7A SO8 |
| CIC 13601 | 830577545300 | SMD IC 74VHC4053MTC TSSOP |
| CL 01001 | 810498237000 | SMD DAEMPF-PERLE 1206 BLM |
| CL 01003 | 810498237000 | SMD DAEMPF-PERLE 1206 BLM |
| CL 01004 | 810498237000 | SMD DAEMPF-PERLE 1206 BLM |
| CL 01005 | 810498237000 | SMD DAEMPF-PERLE 1206 BLM |
| CL 01006 | 810498237000 | SMD DAEMPF-PERLE 1206 BLM |
| CL 01301 | 810498237000 | SMD DAEMPF-PERLE 1206 BLM |
| CL 05001 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 05002 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 07201 | 810498231600 | SMD DAEMPF-PERLE 0603 BLM |
| CL 07202 | 810498231600 | SMD DAEMPF-PERLE 0603 BLM |
| CL 07203 | 810498231600 | SMD DAEMPF-PERLE 0603 BLM |
| CL 09501 | 810498231000 | SMD DAEMPF-PERLE 0805 ACB |
| CL 12600 | 810498233100 | SMD DAEMPF-PERLE 0805 BLM |
| CL 12601 | 810498231600 | SMD DAEMPF-PERLE 0603 BLM |
| CL 12671 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 12672 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 13310 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 13311 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 13313 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 13314 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 13315 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 13316 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|---|---|---|
| CL 13317 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 13318 | 810498231400 | SMD DAEMPF-PERLE 0603 BLM |
| CL 13319 | 810498237000 | SMD DAEMPF-PERLE 1206 BLM |
| CNW 03101 | 877100134900 | SMD R-NETZ 4X100 OHM 5% E |
| CNW 03102 | 877100134900 | SMD R-NETZ 4X100 OHM 5% E |
| CNW 03103 | 877100134900 | SMD R-NETZ 4X100 OHM 5% E |
| CNW 05011 | 877100137300 | SMD R-NETZ 4X1 KOHM 5% EX |
| CNW 05034 | 877100139700 | SMD R-NETZ 4X10 KOHM 5% E |
| CNW 06001 | 877100134900 | SMD R-NETZ 4X100 OHM 5% E |
| CNW 12501 | 877100134900 | SMD R-NETZ 4X100 OHM 5% E |
| CNW 12502 | 877100134900 | SMD R-NETZ 4X100 OHM 5% E |
| CT 08701 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 08702 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 09001 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 09002 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 09003 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 09101 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 09102 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 09103 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 09201 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 09202 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 09203 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 09301 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 09302 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 09303 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 09511 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 09531 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 12601 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 12602 | 830100385800 | SMD TRANS BC858B/ BC857B |
| CT 12661 | 830119013800 | SMD TRANS BSS138 SIE |
| CT 12662 | 830119013800 | SMD TRANS BSS138 SIE |
| CT 12671 | 830119013800 | SMD TRANS BSS138 SIE |
| CT 12672 | 830119013800 | SMD TRANS BSS138 SIE |
| CT 13401 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 13402 | 830100685800 | SMD TRANS BC858C/ BC857C |
| CT 13403 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 13701 | 830100484800 | SMD TRANS BC848B/ BC847B |
| CT 13801 | 830100484800 | SMD TRANS BC848B/ BC847B |
| F 13701 | 814053316000 | SPULE 7X7 160 FARBE 711 |
| F 13801 | 814053316000 | SPULE 7X7 160 FARBE 711 |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION